

Receptor-Ligand Reference Guide

G Protein-Coupled Receptors

Receptor-Ligand Reference Guide

Use these tables to help you select cloned receptors and complementary NEN Radioligands for your research. Our wide range of receptor membrane preparations includes G protein-coupled receptors (pp. 338–346), ion channel receptors (p. 347), transporters (p. 350) and tyrosine kinase receptors (p. 351). Radioligands for other classes of receptors are also listed. If you do not see a cloned receptor you need, please inquire.

For detailed information about our cloned receptor membrane preparations, please see pp. 190–192. For a complete listing of NEN Radioligands, please see the radiochemicals product listing beginning on p. 46.

Cloned Receptor Membrane Preparations					NEN Radioligands		
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
G Protein-Coupled Receptors							
Adenosine	A ₁	Rat	Sf9	6110120001KT	Cyclopentyl-1,3-dipropylxanthine,	A ₁ antagonist	NET974
	A ₁	Rat	CHO	6110511001KT	8-[dipropyl-2,3- ³ H(N)]-		
	A ₁	Human	CHO	6110542001KT	Ethylcarboxamidoadenosine, 5'-N-[adenine-2,8- ³ H]-	A ₁ , A ₂ agonist	NET811
	A _{2A}	Human	HEK293	RBHA2AM100UA	CGS 21680, [carboxyethyl- ³ H(N)]-	A ₂ agonist	NET1021
				RBHA2AM400UA	Ethylcarboxamidoadenosine,	A ₁ , A ₂ agonist	NET811
		A _{2A}	Rat	CHO	6110536001KT	5'-N-[adenine-2,8- ³ H]-	
	A ₃	Rat	HEK293 EBNA	RBRA3M400UA	AB-MECA, [¹²⁵ I]-, (4-amino-3-[¹²⁵ I]iodobenzyl-5'-N-)	A ₃ agonist	NEX312
α Adrenergic	α _{2A}	Human	Sf9	6110113001KT	Iodoclonidine, p-[¹²⁵ I]-,	α ₂ agonist	NEX253
	α _{2A} *	Human	HT-29	RBHL2AM400UA	Clonidine hydrochloride, [benzene ring- ³ H]-	α ₂ agonist	NET613
	α _{2C}	Human	Sf9	6110114001KT	UK-14,304, [imidazolyl-4,5- ³ H]-	α ₂ agonist	NET853
					MK-912, [methyl- ³ H]-	α ₂ antagonist	NET1059
					Rauwolscine, [methyl- ³ H]-	α ₂ antagonist	NET722
					Yohimbine, [methyl- ³ H]-	α ₂ antagonist	NET659
					Epinephrine, levo-[N-methyl- ³ H]-	Endogenous	NET623
					Norepinephrine, levo-[ring-2,5,6- ³ H]-	Endogenous	NET678
					HEAT, [¹²⁵ I]-	α ₁ antagonist	NEX182
					Prazosin, [7-methoxy- ³ H]-	α ₁ antagonist	NET823
				Prazosin analog, [¹²⁵ I]iodoazido-	α ₁ antagonist	NEX219	
β Adrenergic	β ₁	Human	Sf9	6110110001KT	(-)-CGP-12177, [5,7- ³ H]-	Antagonist	NET1061
	β ₂	Human	Sf9	6110106001KT	(-)-Cyanopindolol, [¹²⁵ I]iodo-	Antagonist	NEX189
	β ₂	Human	HEK293 EBNA	RBHBE2M400UA	(±)-Cyanopindolol, [¹²⁵ I]iodo-	Antagonist	NEX174
	β ₃ *	Human	SK-N-MC	RBHBE3M400UA	Dihydroalprenolol hydrochloride, levo-[ring, propyl- ³ H(N)]-	Antagonist	NET720
					(-)-Pindolol, [¹²⁵ I]iodo-	Antagonist	NEX211
				Propranolol, L-[4- ³ H]-	Antagonist	NET515	
Adrenomedullin	CRLR+ RAMP2	Human	Sf9(Gα _s β ₁ γ ₂)	6110136001KT	Adrenomedullin (Tyr), [¹²⁵ I]-, (13–52)	Adrenomedullin receptor agonist	NEX385

Key:

* Non-recombinant

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G Protein-Coupled Receptors								
Angiotensin	AT ₁	Human	Sf9	6110121001KT	Angiotensin I (Tyr ⁴), [¹²⁵ I]-	Endogenous	NEX101	
	AT ₁	Human	CHO	6110533001KT				
					Angiotensin II (Tyr ⁴), [¹²⁵ I]-	Endogenous	NEX105	
					Angiotensin II (Sar ¹ , Tyr ⁴ , Ile ⁸), [¹²⁵ I]-	AT ₂ antagonist	NEX248	
					CGP 42112A, [¹²⁵ I]-	AT ₂ antagonist	NEX324	
					Angiotensin IV (Tyr ²), [¹²⁵ I]-	Non-AT ₁ , Non-AT ₂ agonist	NEX295	
Apelin	APJ	Human	CHO	6110561001KT	Apelin 13 (Glp ⁶⁵ , Nle ⁷⁵ , Tyr ⁷⁷), [¹²⁵ I]-	APJ agonist	NEX393	
Bombesin	BRS1	Human	CHO	RBHBS1M400UA	Bombesin (Tyr ⁴), [¹²⁵ I]-	Agonist	NEX258	
	BRS2	Human	HEK293	RBHBS2M400UA				
	BRS3	Human	Balb 3T3	RBHBS3M400UA	Bombesin (6–14) (D-Tyr ⁶ , βAla ¹¹ , Phe ¹³ , Nle ¹⁴), [¹²⁵ I]-	BRS3 agonist	NEX377	
					Bombesin (Tyr ⁴), [¹²⁵ I]-	Agonist	NEX258	
Bradykinin	B ₂	Human	CHO	RBHB2M400UA	Bradykinin, [2,3-prolyl-3,4- ³ H(N)]-	Endogenous	NET706	
					<i>Please inquire for receptor availability.</i>	Kallidin (Des-Arg ¹⁰),	B ₁ agonist	NET1064
						[3,4-prolyl-3,4- ³ H(N)]-		
						Kallidin (Des-Arg ¹⁰ , Leu ⁹),	B ₁ antagonist	NET1096
					[3,4-prolyl-3,4- ³ H(N)]-			
Calcitonin Gene Related Peptide	CGRP*	Human	SK-N-MC	RBHGRPM400UA	Calcitonin Gene-Related Peptide, [¹²⁵ I]-	CGRP, endogenous	NEX354	
	CRLR+ RAMP1	Human	Sf9(Gα ₃ β ₁ γ ₂)	6110135001KT	Adrenomedullin (Tyr), [¹²⁵ I]-	Adrenomedullin receptor agonist	NEX385	
Cannabinoid	CB ₁	Human	HEK293 EBNA	RBHCB1M100UA	CP 55940, [side chain-2,3,4- ³ H(N)]-	Agonist	NET1051	
				RBHCB1M400UA	WIN 55212-2, [5,7-naphthyl- ³ H]-	Agonist	NET1058	
	CB ₁	Human	Sf9(Gα ₃ β ₁ γ ₂)	6110129001KT	Anandamide, [arachidonyl-	CB, endogenous	NET1073	
	CB ₂	Human	HEK293 EBNA	RBXCB2M100UA	5,6,8,9,11,12,14,15- ³ H]-			
				RBXCB2M400UA				
	CB ₂	Human	Sf9(Gα ₃ β ₁ γ ₂)	6110130001KT				
Chemokine	CCR1	Human	HEK293	RBHCC1M400UA	MIP-1α, [¹²⁵ I]-	CCR1, CCR4, CCR5, endogenous	NEX298	
					RANTES, [¹²⁵ I]-	CCR1, CCR3, CCR4, CCR5, endogenous	NEX292	
	CCR2b	Human	HEK293	6110550001KT	MCP-1, [¹²⁵ I]-, Bolton-Hunter labeled	CCR2, endogenous	NEX332	
					JE, [¹²⁵ I]-, Bolton-Hunter labeled, (murine, recombinant MCP-1)	CCR2 agonist	NEX313	
	CXCR2	Human	Sf9(Gα ₃ β ₁ γ ₂)	6110132001KT	GRO alpha/MGSA, [¹²⁵ I]-	CXCR2, endogenous	NEX321	
	CXCR2	Human	CHO	6110524001KT	Interleukin-8, [¹²⁵ I]-	CXCR1, CXCR2, endogenous	NEX277	
	CXCR6	Human	HEK293	RBHCX6M400UA	CXCL16, [¹²⁵ I]-	CXCR6, endogenous	NEX398	
					Eotaxin, [¹²⁵ I]-	CCR3, endogenous	NEX314	
					TARC, [¹²⁵ I]-	CCR4, endogenous	NEX369	
					MIP-1β, (Leu ³ , Gly ⁴⁷), [¹²⁵ I]-	CCR5, endogenous	NEX299	
MIP-3α, [¹²⁵ I]-, (human, recombinant)					CCR6, endogenous	NEX371		
6-Ckine, [¹²⁵ I]-, Bolton-Hunter labeled					CCR7, endogenous	NEX387		
MIP-3β, [¹²⁵ I]-					CCR7, endogenous	NEX370		
I309, [¹²⁵ I]-, Bolton-Hunter labeled					CCR8, endogenous	NEX364		
CTACK, [¹²⁵ I]-	CCR10, endogenous	NEX391						

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Chemokine (cont)	<i>Please inquire for receptor availability.</i>				Fractalkine, [¹²⁵ I]-	CX3CR1, endogenous	NEX368
					I-TAC, [¹²⁵ I]-	CXCR3, endogenous	NEX376
					IP-10, [¹²⁵ I]-, Bolton-Hunter labeled	CXCR3, endogenous	NEX348
					SDF-1 α , [¹²⁵ I]-	CXCR4, endogenous	NEX346
Cholecystokinin & Gastrin	CCK _A	Human	Sf9	6110125001KT	Cholecystokinin octapeptide, [¹²⁵ I]-, Bolton-Hunter labeled	CNS peripheral	NEX203
	CCK _A	Human	NIH-3T3	6110508001KT			
	CCK _A	Human	NIH-3T3	RBHCKAM400UA			
	CCK _B	Human	HEK293	RBHCKBM400UA	Cholecystokinin octapeptide, [¹²⁵ I]-, Bolton-Hunter labeled	CNS peripheral	NEX203
					Gastrin I (Tyr ¹²), [¹²⁵ I]-, (human)	Endogenous	NEX176
Cholinergic (Acetylcholine)	<i>Please inquire for receptor availability.</i>				Choline chloride, [methyl- ³ H]-	Endogenous	NET109
Cholinergic (Acetylcholine) Muscarinic	M ₁	Human	CHO	RBHM1M100UA	Pirenzepine, [N-methyl- ³ H]-	M ₁ antagonist	NET780
				RBHM1M400UA	4-DAMP, [N-methyl- ³ H]-	M ₁ , M ₃ antagonist	NET1040
					Oxotremorine-M acetate, [methyl- ³ H]-	M ₁ -M ₅ agonist	NET671
					Quinuclidinyl benzilate, L-[benzilic-4,4'- ³ H]-	M ₁ -M ₅ antagonist	NET656
					Scopolamine methyl chloride, [N-methyl- ³ H]-	M ₁ -M ₅ antagonist	NET636
					Acetylcholine iodide, [acetyl- ³ H]-	M ₁ -M ₅ agonist, endogenous	NET113
	M ₂	Human	CHO	RBHM2M100UA	AF-DX 384, [2,3-dipropylamino- ³ H]-	M ₂ antagonist	NET1041
				RBHM2M400UA	Oxotremorine-M acetate, [methyl- ³ H]-	M ₁ -M ₅ agonist	NET671
					Quinuclidinyl benzilate, L-[benzilic-4,4'- ³ H]-	M ₁ -M ₅ antagonist	NET656
					Scopolamine methyl chloride, [N-methyl- ³ H]-	M ₁ -M ₅ antagonist	NET636
					Acetylcholine iodide, [acetyl- ³ H]-	M ₁ -M ₅ agonist, endogenous	NET113
					4-DAMP, [N-methyl- ³ H]-	M ₁ , M ₃ antagonist	NET1040
M ₃	Human	CHO	RBHM3M100UA	Oxotremorine-M acetate, [methyl- ³ H]-	M ₁ -M ₅ agonist	NET671	
			RBHM3M400UA	Quinuclidinyl benzilate, L-[benzilic-4,4'- ³ H]-	M ₁ -M ₅ antagonist	NET656	
				Scopolamine methyl chloride, [N-methyl- ³ H]-	M ₁ -M ₅ antagonist	NET636	
				Acetylcholine iodide, [acetyl- ³ H]-	M ₁ -M ₅ agonist, endogenous	NET113	
				4-DAMP, [N-methyl- ³ H]-	M ₁ , M ₃ antagonist	NET1040	
				Oxotremorine-M acetate, [methyl- ³ H]-	M ₁ -M ₅ agonist	NET671	
M ₄	Human	CHO	RBHM4M100UA	Quinuclidinyl benzilate, L-[benzilic-4,4'- ³ H]-	M ₁ -M ₅ antagonist	NET656	
			RBHM4M400UA	Scopolamine methyl chloride, [N-methyl- ³ H]-	M ₁ -M ₅ antagonist	NET636	
				Acetylcholine iodide, [acetyl- ³ H]-	M ₁ -M ₅ agonist, endogenous	NET113	
				Oxotremorine-M acetate, [methyl- ³ H]-	M ₁ -M ₅ agonist	NET671	
				Quinuclidinyl benzilate, L-[benzilic-4,4'- ³ H]-	M ₁ -M ₅ antagonist	NET656	
				Scopolamine methyl chloride, [N-methyl- ³ H]-	M ₁ -M ₅ antagonist	NET636	
M ₅	Human	CHO	RBHM5M100UA	Quinuclidinyl benzilate, L-[benzilic-4,4'- ³ H]-	M ₁ -M ₅ antagonist	NET656	
			RBHM5M400UA	Scopolamine methyl chloride, [N-methyl- ³ H]-	M ₁ -M ₅ antagonist	NET636	
				Acetylcholine iodide, [acetyl- ³ H]-	M ₁ -M ₅ agonist, endogenous	NET113	
				Oxotremorine-M acetate, [methyl- ³ H]-	M ₁ -M ₅ agonist	NET671	
				Quinuclidinyl benzilate, L-[benzilic-4,4'- ³ H]-	M ₁ -M ₅ antagonist	NET656	
				Scopolamine methyl chloride, [N-methyl- ³ H]-	M ₁ -M ₅ antagonist	NET636	

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G Protein-Coupled Receptors								
Complement					Complement C3a, [¹²⁵ I]-, Bolton-Hunter labeled	C3a, endogenous	NEX356	
	C5a	Human	CHO	61 10526001KT	Complement C5a, [¹²⁵ I]-, Bolton-Hunter labeled	C5a, endogenous	NEX250	
Corticotropin Releasing Factor	CRF1	Human	HEK293	RBHCRF1M400UA	Sauvagine, [¹²⁵ I-Tyr ⁹]-Corticotropin Releasing Factor (Tyr ⁹), [¹²⁵ I]-, (ovine)	CRF agonist	NEX306	
					Corticotropin Releasing Factor (Tyr ⁹), [¹²⁵ I]-, (human, rat)	Endogenous	NEX216	
Dopamine	D ₁	Human	L Cells	61 10513001KT	SCH 23390, [N-methyl- ³ H]-Dihydroxyphenylethylamine, 3,4-[7- ³ H]-	D ₁ , D ₅ antagonist	NET930	
					Dihydroxyphenylethylamine, 3,4-[ring-2,5,6- ³ H]-, (Dopamine)	Endogenous	NET131	
					Dihydroxyphenylethylamine, 3,4-[ring-2,5,6- ³ H]-, (Dopamine)	Endogenous	NET673	
	D _{2L} D _{2s}	Human	Sf9	CHO	61 10137001KT RBHD2CM100UA RBHD2CM400UA	Raclopride, [methoxy- ³ H]-	D ₂ antagonist	NET975
						Spiperone, [benzene ring- ³ H]-	D ₂ antagonist	NET565
						2'-Spiperone, -[¹²⁵ I]iodo-	D ₂ antagonist	NEX284
						(-)Sulpiride, [methoxy- ³ H]-	D ₂ antagonist	NET775
						YM-09151-2, [N-methyl- ³ H]-	D ₂ antagonist	NET1004
						Quinpirole, [N-propyl- ³ H]-	D ₂ , D ₃ agonist	NET1085
						R (+) trans-7-hydroxy-PIPAT, [¹²⁵ I]-	D ₂ , D ₃ agonist	NEX307
						Methylspiperone, [N-methyl- ³ H]-	D ₂ , D ₃ antagonist	NET856
						Dihydroxyphenylethylamine, 3,4-[7- ³ H]-	Endogenous	NET131
						Dihydroxyphenylethylamine, 3,4-[ring-2,5,6- ³ H]-, (Dopamine)	Endogenous	NET673
	D ₃	Rat	Sf9	61 10139001KT	Quinpirole, [N-propyl- ³ H]-	D ₂ , D ₃ agonist	NET1085	
					R (+) trans-7-hydroxy-PIPAT, [¹²⁵ I]-	D ₂ , D ₃ agonist	NEX307	
					Methylspiperone, [N-methyl- ³ H]-	D ₂ , D ₃ antagonist	NET856	
					Dihydroxyphenylethylamine, 3,4-[7- ³ H]-, Dihydroxyphenylethylamine, 3,4-[ring-2,5,6- ³ H]-, (Dopamine)	Endogenous	NET131	
	D _{4,2} D _{4,4} D _{4,7}	Human	Sf9	61 10112001KT	Dihydroxyphenylethylamine, 3,4-[7- ³ H]-	Endogenous	NET131	
					Dihydroxyphenylethylamine, 3,4-[ring-2,5,6- ³ H]-, (Dopamine)	Endogenous	NET673	
Human		CHO	61 10122001KT	61 10520001KT				
				61 10520001KT				
Human		Sf9	61 10123001KT	61 10123001KT				
				61 10123001KT				
Human		CHO	61 10123001KT	61 10123001KT				
				61 10123001KT				
D ₅	Human	HEK293	RBHD5M400UA	SCH 23390, [N-methyl- ³ H]-Dihydroxyphenylethylamine, 3,4-[7- ³ H]-	D ₁ , D ₅ antagonist	NET930		
				Dihydroxyphenylethylamine, 3,4-[ring-2,5,6- ³ H]-, (Dopamine)	Endogenous	NET131		

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Endothelin	ETA	Human	CHO	6110547001KT	Endothelin-1 (Tyr ¹⁹), [¹²⁵ I]-, (human, porcine)	Endogenous	NEX259
Formyl-Methionyl Peptides	FPR1	Human	CHO	6110527001KT	WKYMVm, [¹²⁵ I]-	FPR1, FPRL1 agonist	NEX386
	FPRL1	Human	CHO	6110563001KT	Bolton-Hunter labeled		
GABA	B1a	Human	CHO	6110545001KT	Baclofen, (-)-[butyl-4- ³ H(N)]-	GABA-B agonist	NET867
	B1b	Human	CHO	6110546001KT	Aminobutyric acid, γ-[2,3- ³ H(N)]-	Endogenous	NET191
	B1a	Human	HEK293	6110560001KT	Aminobutyric acid, γ-[2,3- ³ H(N)]-	Endogenous	NET191X
	B1b	Human	HEK293	6110557001KT	Butyl bicyclophosphorothionate, tertiary-[³⁵ S]-	Cl-channel non-competitive antagonist	NEGO49
	B1a + R2	Human	HEK293	6110559001KT			
	B1b + R2	Human	HEK293	6110556001KT			
Galanin	GalR1	Human	HEK293 EBNA	6110537001KT	Galanin (Tyr ²⁶), [¹²⁵ I]-, (porcine)	Galanin agonist	NEX243
	GalR1	Human	HEK293 EBNA	RBXGL1M400UA	Galanin, [¹²⁵ I]-, (human)	Galanin, endogenous	NEX333
	GalR2	Human	CHO	RBHGL2M400UA	Galanin (Tyr ²⁶), [¹²⁵ I]-, (porcine)	Galanin agonist	NEX243
					Galanin, [¹²⁵ I]-, (2-11)	GalR2, GalR3 agonist	NEX416
				Galanin, [¹²⁵ I]-, (human)	Galanin, endogenous	NEX333	
Gastric Inhibitory Peptide	GIP	Human	HEK293	RBHGIPM400UA	Gastric Inhibitory Polypeptide, [¹²⁵ I]-	Endogenous	NEX402
Ghrelin	GHS-R	Human	HEK293	RBHGHSM400UA	Ghrelin (His), [¹²⁵ I]-, (human)	GHS-R, endogenous	NEX388
					Ghrelin (Tyr ⁴), [¹²⁵ I]-	GHS-R agonist	NEX417
Glucagon	<i>Please inquire for receptor availability.</i>				Glucagon, [¹²⁵ I]-	Endogenous	NEX207
Glucagon-Like Peptide	<i>Please inquire for receptor availability.</i>				Exendin, [¹²⁵ I]-, (9-39)	GLP-1 antagonist	NEX335
					GLP-1, [¹²⁵ I]-, (7-36)	GLP-1 agonist	NEX308
					GLP-2, [¹²⁵ I]-	GLP-2 agonist	NEX390
GPR8	GPR8	Human	HEK293	RBHGP8M400UA	Neuropeptide W23, [¹²⁵ I]-, (human)	GPR8, endogenous	NEX403
					Neuropeptide B23 (Des-Br), [¹²⁵ I]-	GPR8, endogenous	NEX405
GPR103	GPR103	Human	HEK293	RBH103M400UA	QRFP-43, [¹²⁵ I]-, (human)	GPR103, endogenous	NEX408
Histamine	H ₁	Human	CHO	6110564001KT	Pyridylamine, [pyridinyl 5- ³ H]-	H ₁ antagonist	NET594
					Histamine dihydrochloride, [ring, methylenes- ³ H(N)]-	Endogenous	NET732
	H ₂	Human	HEK293	6110565001KT	Tiotidine, [methyl- ³ H]-, (ICI 125,211)	H ₂ antagonist	NET688
					Histamine dihydrochloride, [ring, methylenes- ³ H(N)]-	Endogenous	NET732
				Methylhistamine dihydrochloride, N-α-[methyl- ³ H]-	H ₃ agonist	NET1027	
Leukotrienes	<i>Please inquire for receptor availability.</i>				Leukotriene B ₄ , [5,6,8,9,11,12,14,15- ³ H(N)]-	Endogenous	NET852
					Leukotriene C ₄ , [14,15,19,20- ³ H(N)]-	Endogenous	NET1018
					Leukotriene D ₄ , [14,15,19,20- ³ H(N)]-	Endogenous	NET1019
Luteinizing Hormone Releasing Hormone	<i>Please inquire for receptor availability.</i>				Luteinizing Hormone Releasing Hormone (D-Trp ⁶), [¹²⁵ I]-	LHRH receptor agonist	NEX365
					Luteinizing Hormone Releasing Hormone (Tyr ⁶), [¹²⁵ I]-	LHRH receptor agonist	NEX163

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					Melanin Concentrating Hormone, [¹²⁵ I]-, (human)	MCH receptor agonist	NEX373	
					Melanin Concentrating Hormone, (Phe ¹³ , Tyr ¹⁹), [¹²⁵ I]-, (human, mouse, rat)	MCH receptor agonist	NEX375	
					S36057 (Tyr), [¹²⁵ I]-	MCH receptor agonist	NEX396	
Melanocortin	MC ₃ **	Human	HEK293	RBXMC3M400UA	SHU9119, [¹²⁵ I]-	MC ₃ , MC ₄ antagonist	NEX362	
					α-MSH (Nle ⁴ , Phe ⁷), [¹²⁵ I]-	MC agonist	NEX352	
	MC ₄ **	Human	HEK293	RBHMC4M100UA RBHMC4M400UA	SHU9119, [¹²⁵ I]-	MC ₃ , MC ₄ antagonist	NEX362	
					AGRP (Ac-87-132), [¹²⁵ I]-	MC ₄ agonist	NEX372	
	MC ₅	Human	HEK293 EBNA	RBXMC5M400UA	MT II (His), [¹²⁵ I]-	MC ₄ agonist	NEX374	
					α-MSH (Nle ⁴ , Phe ⁷), [¹²⁵ I]-	MC agonist	NEX352	
Melatonin	<i>Please inquire for receptor availability.</i>				Melatonin, 2-[¹²⁵ I]-	Agonist	NEX236	
Metastin	Metastin	Human	CHO	RBHMTSM400UA	Metastin, [¹²⁵ I]-, (45–54)	Mestastin agonist	NEX395	
Motilin	MOT1	Human	HEK293	RBHMTM400UA	Motilin, [¹²⁵ I]-	Motilin receptor, endogenous	NEX378	
Neurokinin	NK ₁ *	Human	UC11	6110551001KT	Hemokinin-1, [¹²⁵ I]-	NK ₁ agonist	NEX414	
					Bolton-Hunter labeled Substance P (Lys ³), [¹²⁵ I]-	NK ₁ agonist	NEX190	
					Bolton-Hunter labeled Substance P (Tyr ⁸), [¹²⁵ I]-	NK ₁ agonist	NEX152	
					Substance P (9-Sar, 11-Met(O ²)), [2-prolyl-3,4- ³ H]-	NK ₁ agonist	NET1025	
					Substance P, [leucyl-3,4,5- ³ H(N)]-	NK ₁ agonist	NET1115	
	NK ₂	Human	CHO	6110510001KT	Neurokinin A, [¹²⁵ I]-, ([¹²⁵ I]-Substance K)	NK ₂ agonist	NEX252	
					SR 48968, [benzamide-4- ³ H]-	NK ₂ antagonist	NET1077	
	NK ₃	Human	CHO	6110534001KT	Eledoisin (Lys ⁴), [¹²⁵ I]-	NK ₂ , NK ₃ agonist	NEX218	
					Bolton-Hunter labeled Neurokinin B (MePhe ⁷), [¹²⁵ I]-	NK ₃ agonist	NEX285	
Neuromedin U	NMU1	Human	HEK293	RBHNU1M400UA	Senktide, [phenylalanyl-3,4,5- ³ H]-	NK ₃ agonist	NET997	
					Eledoisin (Lys ⁴), [¹²⁵ I]-	NK ₂ , NK ₃ agonist	NEX218	
Neuromedin U	NMU2	Human	HEK293	RBHNU2M400UA	Neuromedin U-25 (Tyr ¹⁸), [¹²⁵ I]-	NM ₁ , NM ₂ agonist	NEX383	
					Neuromedin U-8, [¹²⁵ I]-	NM ₁ , NM ₂ agonist	NEX392	
Neuropeptide FF	NPFF1	Human	CHO-DHFR(-)	RBHNF1M400UA	Neuropeptide FF (D-Tyr ¹), N-MePhe ³ , [¹²⁵ I]-	NPFF1/NPFF2 agonist	NEX381	
					NPFF2	Human	CHO	RBHNF2M400UA
Neuropeptide S					Neuropeptide S (Tyr ¹⁰), [¹²⁵ I]-, (human)	Neuropeptide S agonist, endogenous	NEX411	
Neuropeptide Y	NPY ₁ *	Human	SK-N-MC	RBHNP1M400UA	Peptide YY (Leu ³¹ , Pro ³⁴), [¹²⁵ I]-	NPY ₁ agonist	NEX334	
					6110133001KT	Peptide YY, [¹²⁵ I]-, (porcine)	NPY agonist	NEX240
	NPY ₁	Human	SF9			Peptide YY, [¹²⁵ I]-, (human)	Endogenous	NEX341
						Pancreatic polypeptide, [¹²⁵ I]-	Endogenous	NEX315
	NPY ₂ *	Human	KAN-TS	RBHNP2M400UA	Peptide YY, [¹²⁵ I]-, (porcine)	NPY agonist	NEX240	
					Peptide YY, [¹²⁵ I]-, (human)	Endogenous	NEX341	
					Pancreatic polypeptide, [¹²⁵ I]-	Endogenous	NEX315	

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Receptor-Ligand Reference Guide

G Protein-Coupled Receptors

Cloned Receptor Membrane Preparations					NEN Radioligands		
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
G Protein-Coupled Receptors							
Neurotensin	NTS1	Human	CHO	6110518001KT	Neurotensin (Tyr ³), [¹²⁵ I]-	Endogenous	NEX198
	NTS1	Human	HEK293	RBXNT1M400UA	Neurotensin, [3,11-tyrosyl-3,5- ³ H(N)]-	Endogenous	NET605
	NT2	Human	HEK293	6110566001KT			
Obestatin	<i>Please inquire for receptor availability.</i>				Obestatin, [¹²⁵ I]-	Endogenous	NEX415
Opioid	δ-opioid (OP1)	Mouse	Sf9	6110115001KT	Naltrindole, [5',7'- ³ H]-	Delta antagonist	NET1065
		Human	CHO	RBHODM400UA	Enkephalin (2-D-alanine-5-D-leucine), [tyrosyl-3,5- ³ H(N)]-	Delta agonist	NET648
		Human	HEK293	6110549001KT	Enkephalin, (2-D-penicillamine, 5-D-penicillamine), [tyrosyl-2,6- ³ H(N)]-, (DPDPE)	Delta agonist	NET922
	κ-opioid (OP2)	Human	HEK293	6110558001KT	Deltorphin II (2-D-Ala), [tyrosyl-3,5- ³ H]-	Delta agonist	NET1087
					Diprenorphine, [15,16- ³ H]-	Antagonist	NET1121
					U-69,593, [phenyl-3,4- ³ H]-	Kappa agonist	NET952
	μ-opioid (OP3)	Human	CHO	RBHOMM100UA	Diprenorphine, [15,16- ³ H]-	Antagonist	NET1121
				RBHOMM400UA	Naloxone, [N-allyl-2,3- ³ H]-	Mu antagonist	NET719
					DAMGO, [tyrosyl-3,5- ³ H(N)]-	Mu agonist	NET902
ORL-1 (OP4)	Human	CHO	6110540001KT	Diprenorphine, [15,16- ³ H]-	Antagonist	NET1121	
	Human	HEK293	RBHORLM100UA	Nociceptin (Tyr ¹⁴), [¹²⁵ I]-	ORL-1 agonist	NEX338	
ORL-1 (OP4)	Human	HEK293	RBHORLM400UA	Nociceptin, [leucyl-3,4,5- ³ H]-	ORL-1 agonist	NET1130	
Orexin	<i>Please inquire for receptor availability.</i>				Orexin A, [¹²⁵ I]-	ORX1, ORX2 agonist	NEX367
Oxytocin	<i>Please inquire for receptor availability.</i>				Ornithine Vasotocin Analog, [¹²⁵ I]-	Oxytocin antagonist	NEX254
					Oxytocin (Tyr ²), [¹²⁵ I]-	Endogenous	NEX187
					Oxytocin, [Tyr ² ,6- ³ H]-	Endogenous	NET858
Parathyroid Hormone	<i>Please inquire for receptor availability.</i>				Parathyroid Hormone amide (Nle ^{8,21} , Tyr ³⁴), [¹²⁵ I]-, (rat, 1-34)	PTH ₁ , PTH ₂ agonist	NEX353
					Parathyroid Hormone (Nle ^{8,18} , Tyr ³⁴), [¹²⁵ I]-, (human, 1-34)	Endogenous	NEX397
Platelet Activating Factor	<i>Please inquire for receptor availability.</i>				Hexadecyl-2-acetyl-sn-glycerol-3-phosphorylcholine, 1-O-[acetyl- ³ H(N)]-	Endogenous	NET910
Prokineticin	PK1	Human	HEK293	RBHPK1M400UA	MIT-1, [¹²⁵ I]-, Bolton-Hunter labeled	PK1, PK2 antagonist	NEX410
Prolactin	<i>Please inquire for receptor availability.</i>				Prolactin, [¹²⁵ I]-	Endogenous	NEX108
Prostanoid	CRTH2	Human	HEK293	RBH2M400UA	Prostaglandin D ₂ , [5,6,8,9,12,14,15- ³ H(N)]-	Endogenous	NET616
					Prostaglandin E ₂ , [5,6,8,11,12,14,15- ³ H(N)]-	Endogenous	NET428
					SQ 29548, [5,6- ³ H(N)]-	TP receptor antagonist	NET936
	TP	Human	HEK293 EBNA	RBHTPM400UA	Prostaglandin F _{2α} , [5,6,8,9,11,12,14,15- ³ H(N)]-	FP receptor agonist	NET433
Purinergic	<i>Please inquire for receptor availability.</i>				α,β-Methylene-ATP, tetrasodium salt, [2,8- ³ H]-	P2x-purinergic agonist	NET1068
Relaxin	<i>Please inquire for receptor availability.</i>				H2 Relaxin, [¹²⁵ I]-, Bolton-Hunter labeled	RXFP1(LGR7) agonist	NEX409
					H3 Relaxin, [¹²⁵ I]-	RXFP1(LGR7) agonist	NEX418
					INSL-3, [¹²⁵ I]-	RXFP2 (LGR8), RXFP3 (GPCR135) agonist	NEX419

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Receptor-Ligand Reference Guide

G Protein-Coupled Receptors

Cloned Receptor Membrane Preparations					NEN Radioligands		
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
G Protein-Coupled Receptors							
Serotonin	5-HT _{1A}	Human	HEK293 EBNA	RBHS1AM400UA	8-hydroxy-DPAT, [propyl-2,3-ring-1,2,3- ³ H]-	5-HT _{1A} agonist	NET929
	5-HT _{1A}	Human	CHO	6110501001KT	MPPF, [methyl- ³ H]-	5-HT _{1A} antagonist	NET1109
					Lysergic acid diethylamide, [N-methyl- ³ H]-	Agonist	NET638
					(+)-Lysergic acid diethylamide, 2-[¹²⁵ I]iodo-, ([¹²⁵ I]-LSD)	Agonist	NEX199
	5-HT _{2C}	Human	HEK293	6110548001KT	Hydroxytryptamine creatinine sulfate, 5-[1,2- ³ H(N)]-	Endogenous	NET498
					(±)-DOI, [¹²⁵ I]-	5-HT ₂ agonist	NEX255
					Spiperone, [benzene ring- ³ H]-	5-HT ₂ antagonist	NET565
	5-HT _{2A}	Human	CHO	RBHS5AM100UA RBHS5AM400UA	Ketanserin hydrochloride, [ethylene- ³ H]-, (R41 468)	5-HT ₂ antagonist	NET791
					Lysergic acid diethylamide, [N-methyl- ³ H]-	Agonist	NET638
					(+)-Lysergic acid diethylamide, 2-[¹²⁵ I]iodo-, ([¹²⁵ I]-LSD)	Agonist	NEX199
	5-HT _{5A}	Human	CHO	RBHS5AM100UA RBHS5AM400UA	Hydroxytryptamine creatinine sulfate, 5-[1,2- ³ H(N)]-	Endogenous	NET498
					Lysergic acid diethylamide, [N-methyl- ³ H]-	Agonist	NET638
					(+)-Lysergic acid diethylamide, 2-[¹²⁵ I]iodo-, ([¹²⁵ I]-LSD)	Agonist	NEX199
	5-HT ₆	Human	HEK293	RBHS6M100UA RBHS6M400UA	Lysergic acid diethylamide, [N-methyl- ³ H]-	Agonist	NET638
5-HT ₆	Rat	HEK293	RBR6M400UA	(+)-Lysergic acid diethylamide, 2-[¹²⁵ I]iodo-, ([¹²⁵ I]-LSD)	Agonist	NEX199	
5-HT ₇	Rat	HEK293	RBR7M400UA	Hydroxytryptamine creatinine sulfate, 5-[1,2- ³ H(N)]-	Endogenous	NET498	
				Lysergic acid diethylamide, [N-methyl- ³ H]-	Agonist	NET638	
				(+)-Lysergic acid diethylamide, 2-[¹²⁵ I]iodo-, ([¹²⁵ I]-LSD)	Agonist	NEX199	
5-HT ₇	Human	CHO	6110512001KT	Hydroxytryptamine creatinine sulfate, 5-[1,2- ³ H(N)]-	Endogenous	NET498	
Somatostatin	SST ₄	Human	HEK293 EBNA	RBHST4M400UA	(±)-Cyanopindolol, [¹²⁵ I]iodo-	5-HT _{1B} antagonist	NEX174
	SST ₅	Human	HEK293 EBNA	RBHST5M100UA RBHST5M400UA	Carboxamidotryptamine, [1,2- ³ H]-5-	5-HT _{1D} agonist	NET1071
					Somatostatin (Tyr ¹¹), [¹²⁵ I]-	SST ₁ -SST ₅	NEX389
Thyrotropin Releasing Hormone	<i>Please inquire for receptor availability.</i>				Thyrotropin Releasing Hormone (3-methyl-histidine ²), [L-histidyl-4- ³ H(N), L-propyl-3,4- ³ H(N)]-	TRH1, TRH2 receptors	NET705
					Thyrotropin Releasing Hormone (His ²), [¹²⁵ I]-	TRH1, TRH2 receptors	NEX153

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Receptor-Ligand Reference Guide

G Protein-Coupled Receptors/Cytokines/Excitatory Amino Acids

Cloned Receptor Membrane Preparations					NEN Radioligands			
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.	
G Protein-Coupled Receptors								
Urotensin II	UR ₂	Mouse	CHO	RBMUR2M100UA RBMUR2M400UA	Urotensin II (Tyr ⁹), [¹²⁵ I]-, (human)	Endogenous	NEX379	
Vasoactive Intestinal Polypeptide (VIP)	VIP*	Human	HT-29	RBHVIPM400UA	PACAP 27, [¹²⁵ I]- Vasoactive Intestinal Polypeptide, [¹²⁵ I]-	PACAP, endogenous VIP	NEX294 NEX192	
Vasopressin	V _{1A}	Human	HEK293	RBHV1AM400UA	Vasopressin (linear) V _{1A} antagonist (phenylacetyl ¹ , -O-Me-D-Tyr ² , Arg ^{6,8} , Tyr ⁹), [¹²⁵ I]- Vasopressin, 8-arginine, [phenylalanyl-3,4,5- ³ H(N)]-	V _{1A} antagonist Endogenous	NEX310 NET800	
	V _{1B}	Human	HEK293	RBHV1BM400UA	Vasopressin, 8-arginine, [phenylalanyl-3,4,5- ³ H(N)]-	Endogenous	NET800	
	V _{1B}	Human	CHO	6110543001KT	[phenylalanyl-3,4,5- ³ H(N)]-			
	V ₂	Human	CHO	6110541001KT	Vasopressin, 8-arginine, [phenylalanyl-3,4,5- ³ H(N)]-	Endogenous	NET800	

Cloned Receptor Membrane Preparations					NEN Radioligands			
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.	
Cytokines								
Interleukin	<i>Please inquire for receptor availability.</i>				Interleukin-1 β , [¹²⁵ I]- Interleukin-2, [¹²⁵ I]- Interleukin-6, [¹²⁵ I]-	Endogenous Endogenous Endogenous	NEX232 NEX229 NEX269	
Leptin	<i>Please inquire for receptor availability.</i>				Leptin, [¹²⁵ I]- Leptin, [¹²⁵ I]-, (murine, recombinant)	ObR, endogenous ObR agonist	NEX347 NEX340	

Cloned Receptor Membrane Preparations					NEN Radioligands			
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.	
Excitatory Amino Acids								
Aspartate	<i>Please inquire for receptor availability.</i>				Aspartic acid, D-[2,3- ³ H]-	Aspartate agonist	NET 581	
Glutamate	<i>Please inquire for receptor availability.</i>				CGP 39653, [propyl-2,3,3 ³ H]- MK-801, (+)-[3- ³ H]- Ifenprodil, [phenyl- ³ H]- Amino-3-hydroxy-5-methylisoxazole-4-propionic acid, DL- α -[5-methyl- ³ H]- Kainic acid, [vinylidene- ³ H]- TCP, N-(1-(2-thienyl)cyclohexyl)-3,4-piperidine, [piperidyl-3,4- ³ H(N)]- NAAG, [glutamate-3,4- ³ H]- Glutamic acid, L-[3,4- ³ H]-	NMDA antagonist Non-competitive NMDA antagonist NMDA, polyamine site AMPA agonist Kainate agonist Non-competitive Glutamate antagonist Glutamate, endogenous Endogenous	NET1050 NET972 NET1089 NET833 NET875 NET886 NET1082 NET490	
Glycine	<i>Please inquire for receptor availability.</i>				Serine, D-[³ H(G)]- Strychnine, [benzene-ring- ³ H]-	Glycine, endogenous Glycine antagonist	NET1092 NET773	

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Cloned Receptor Membrane Preparations					NEN Radioligands		
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
Ion Channels							
Benzodiazepine (GABA-A)	<i>Please inquire for receptor availability.</i>				Diazepam, [methyl- ³ H]- Flunitrazepam, [methyl- ³ H]- Muscimol, 3-hydroxy-5-aminomethylisoxazole, [methylene- ³ H(N)]- SR 95531, [butyryl-2,3- ³ H]- Pregnan-3 α -ol-20-one, 5 α - [9,11,12- ³ H(N)]- RO 5-4864, [N-methyl- ³ H]- PK 11195, [N-methyl- ³ H]- RO 15-1788, [N-methyl- ³ H]- RO 15-4513, [7,9- ³ H]-	GABA-A agonist GABA-A agonist GABA-A agonist GABA-A antagonist GABA-A, modulator Peripheral agonist Peripheral antagonist Central antagonist Photoaffinity antagonist	NET564 NET567 NET574 NET946 NET1047 NET704 NET885 NET757 NET925
Calcium Channel	<i>Please inquire for receptor availability.</i>				Calcium-45 radionuclide ω -Conotoxin GVIA (Tyr ²²), [¹²⁵ I]- ω -Conotoxin MVIC, [¹²⁵ I]- Diltiazem, cis-(+)-[N-methyl- ³ H]- Nitrendipine, [5-methyl- ³ H]- PN 200-110, (+)-[5-methyl- ³ H]- Ryanodine, [9,21- ³ H(N)]- Verapamil hydrochloride, [N-methyl- ³ H]-	n/a N-Type antagonist Non-L-Type antagonist L-Type antagonist L-Type antagonist L-Type antagonist Ryanodine L-Type antagonist	NEZ013 NEX239 NEX323 NET847 NET741 NET863 NET950 NET810
Cholinergic (Acetylcholine) Nicotinic	Nicotinic*	Human	IMR32	RBHNCM400UA	Epibatidine, [¹²⁵ I]-, ([¹²⁵ I]-IPH) (+/-)-Epibatidine, [5,6-bicycloheptyl- ³ H]- A-85380, [¹²⁵ I]- α -Bungarotoxin (Tyr ⁵⁴), [¹²⁵ I]- Cytisine HCl, [3,5- ³ H(N)]- Nicotine, L-(-)-[N-methyl- ³ H]-	CNS, skeletal muscle and autonomic ganglion agonist CNS, skeletal muscle and autonomic ganglion agonist Neuronal CNS $\alpha_4\beta_2$ agonist Neuromuscular antagonist CNS agonist CNS agonist	NEX358 NET1102 NEX413 NEX126 NET1054 NET827
Potassium Channel	<i>Please inquire for receptor availability.</i>				Apamin (His ¹⁸ -NH ₂), [¹²⁵ I]- Glibenclamide, glyburide, [cyclohexyl-2,3- ³ H(N)]- Rubidium-86 radionuclide	Antagonist ATP-dependent antagonist Potassium flux	NEX242 NET1024 NEZ072
hERG	K+ channel	Human	HEK293	RBHERGM400UA	BeKm-1 (Tyr ¹¹), [¹²⁵ I]- Astemizole, [O-methyl- ³ H]-	ERG antagonist ERG antagonist	NEX412 NET1140
Serotonin	5-HT ₃	Human	HEK293	RBHS3M100UA RBHS3M400UA	BRL-43694, [9-methyl- ³ H]- GR 65630, [N-methyl- ³ H]-	5-HT ₃ antagonist 5-HT ₃ antagonist	NET1030 NET1011
Sodium Channel	<i>Please inquire for receptor availability.</i>				Batrachotoxinin A 20- α -benzoate, [benzoyl-2,5- ³ H]- Sodium-22 radionuclide	Activator Sodium flux	NET876 NEZ081
Vanilloid	<i>Please inquire for receptor availability.</i>				Resiniferatoxin, [³ H]-	Vanilloid agonist	NET1132

Receptor-Ligand Reference Guide

Sigma/Signal Transduction

Cloned Receptor Membrane Preparations					NEN Radioligands		
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
Sigma							
Sigma (Non-opiate)	<i>Please inquire for receptor availability.</i>				(+)-Pentazocine, [ring-1,3- ³ H]- DTG (1,3-di-o-tolylguanidine, [p-ring- ³ H]-), [5- ³ H(N)]- Ifenprodil, [phenyl- ³ H]-	Sigma Sigma Sigma, NMDA	NET1056 NET986 NET1089

Cloned Receptor Membrane Preparations					NEN Radioligands		
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
Signal Transduction							
Inositol triphosphate	<i>Please inquire for receptor availability.</i>				Inositol-1,3,4,5-tetrakisphosphate, D-[inositol-1- ³ H(N)]- Inositol-1,4,5-trisphosphate, D-[inositol-1- ³ H(N)]-	Endogenous Endogenous	NET941 NET911
Nitric Oxide	<i>Please inquire for receptor availability.</i>				Arginine monohydrochloride, L-[2,3,4- ³ H]-	NOS substrate	NET1123
Phospholipase	<i>Please inquire for receptor availability.</i>				Phosphatidylinositol-4,5-bisphosphate, [1- ³ H]-, (inositol-1- ³ H) Phosphatidylinositol 4,5-bisphosphate, [inositol-2- ³ H(N)]-, (PIP2)	PLC, endogenous PLC, endogenous	NET1135 NET895
Sphingomyelase	<i>Please inquire for receptor availability.</i>				Sphingomyelin [choline methyl- ³ H]-,	Sphingomyelase substrate	NET1134
Fatty acid	<i>Please inquire for receptor availability.</i>				Myristic acid, [9,10- ³ H(N)]-	Endogenous substrate	NET830



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Receptor-Ligand Reference Guide

Steroids

Receptor Type	Cloned Receptor Membrane Preparations				NEN Radioligands		
	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
Steroids							
Aldosterone	<i>Please inquire for receptor availability.</i>				Aldosterone, D-[1,2,6,7- ³ H(N)]-	MR, endogenous	NET419
Androgen	<i>Please inquire for receptor availability.</i>				Dihydrotestosterone (5 α androstan-17 β -OL-3-one), [1,2,4,5,6,7- ³ H(N)]-	AR, endogenous	NET453
					Testosterone, [1,2,6,7,16,17- ³ H(N)]-	AR, endogenous	NET553
					Testosterone, [1,2,6,7- ³ H(N)]-	AR, endogenous	NET370
					Methyltrienolone (R1881)	AR agonist	NLP005
					Methyltrienolone, [17 α -methyl- ³ H]-	AR photoaffinity agonist	NET590
					Mibolerone	AR agonist	NLP024
					Mibolerone, [17 α -methyl- ³ H]-	AR agonist	NET919
Ecdysteroid	<i>Please inquire for receptor availability.</i>				Ecdysone, α -[23,24- ³ H(N)]-	Ecdysteroid agonist	NET621
					Ponasterone A, [24,25,26,27- ³ H(N)]-	Ecdysteroid agonist	NET1070
Estrogen	<i>Please inquire for receptor availability.</i>				Estradiol, [2,4,6,7,16,17- ³ H(N)]-	ER, endogenous	NET517
					Estradiol, [2,4,6,7- ³ H(N)]-	ER, endogenous	NET317
					Estradiol 17 β -D-glucuronide, [Estradiol-6,7- ³ H(N)]-	ER, endogenous	NET1106
					3,17 β -Estradiol, 16 α -[¹²⁵ I]iodo-	ER, endogenous	NEX144L
					3,17 β -Estradiol, 16 α -[¹²⁵ I]iodo-	ER, endogenous	NEX144
Glucocorticoid	<i>Please inquire for receptor availability.</i>				Dexamethasone, [6,7- ³ H(N)]-	GR agonist	NET467
					Corticosterone, [1,2,6,7- ³ H(N)]-	GR, endogenous	NET399
					Hydrocortisone, [1,2,6,7- ³ H(N)]-, (Cortisol, [1,2,6,7- ³ H(N)]-)	GR, endogenous	NET396
Progestin	<i>Please inquire for receptor availability.</i>				Progesterone, [1,2,6,7- ³ H(N)]-	PR, endogenous	NET381
					Promegestone, [17 α -methyl- ³ H]-	Photoaffinity agonist	NET555
					Promegestone, (R5020)	PR Photoaffinity agonist	NLP004
Thyroid Hormones	<i>Please inquire for receptor availability.</i>				Thyroxine, L-, [¹²⁵ I]-	THR, endogenous	NEX111
					Thyroxine, L-, [¹²⁵ I]-	THR, endogenous	NEX111H
					Thyroxine, L-, [¹²⁵ I]-	THR, endogenous	NEX111X
					Triiodothyronine, L-3,3',5', [¹²⁵ I]-	THR, endogenous	NEX109
					Triiodothyronine, L-3,5,3'-[¹²⁵ I]-	THR, endogenous	NEX110
					Triiodothyronine, L-3,5,3'-[¹²⁵ I]-	THR, endogenous	NEX110H
					Triiodothyronine, L-3,5,3'-[¹²⁵ I]-	THR, endogenous	NEX110X
Vitamin D ₃	<i>Please inquire for receptor availability.</i>				Dihydroxyvitamin D ₃ , 1 α , 25-[26,27- ³ H]-	VDR, endogenous	NET626
					Hydroxyvitamin D ₃ , 25-[26,27- ³ H]-	Endogenous	NET349

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Transporters

Receptor Type	Cloned Receptor Membrane Preparations				NEN Radioligands		
	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
Transporters							
Acetylcholine	<i>Please inquire for receptor availability.</i>				Hemicholinium-3, diacetate salt, [methyl- ³ H]-	Uptake inhibitor	NET884
Dopamine	Dopamine	Human	CHO	RBHDATM100UA	RTI-121, [¹²⁵ I]-	Uptake inhibitor	NEX318
				RBHDATM400UA	RTI-55, [¹²⁵ I]-	Uptake inhibitor	NEX272
					WIN 35428, [N-methyl- ³ H]-	Uptake inhibitor	NET1033
					Methyl-4-phenylpyridinium acetate, [N-methyl- ³ H]-, (MPP (+))	Uptake inhibitor	NET914
					Mazindol, [4'- ³ H]-	Uptake inhibitor	NET816
					GBR 12935, [propylene-2,3- ³ H]-	Uptake inhibitor	NET918
Norepinephrine	Norepinephrine	Human	MDCK	RBHNETM100UA	Cocaine, levo-[benzoyl-3,4- ³ H(N)]-	Uptake inhibitor	NET510
				RBHNETM400UA	Desmethylimipramine hydrochloride, [benzene ring, 10,11- ³ H]-	Uptake inhibitor	NET593
					Nisoxetine hydrochloride, [N-methyl- ³ H]-	Uptake inhibitor	NET1084
Serotonin	Serotonin	Human	HEK293	RBHSTM100UA	Citalopram, [N-methyl- ³ H]-	Uptake inhibitor	NET1039
				RBHSTM400UA	Imipramine hydrochloride, [benzene ring- ³ H(N)]-	Uptake inhibitor	NET576
					Paroxetine, [phenyl-6'- ³ H]-	Uptake inhibitor	NET869
Transferrin	<i>Please inquire for receptor availability.</i>				Transferrin, [¹²⁵ I]-, diferric, (human)	Endogenous	NEX212



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Receptor-Ligand Reference Guide

Tyrosine Kinase Receptors

Cloned Receptor Membrane Preparations					NEN Radioligands		
Receptor Type	Subtype	Species	Host	Product No.	Ligand	Pharmacological Action	Product No.
Tyrosine Kinase Receptors							
Epidermal Growth Factor	EGF*	Human	A-431	RBHEGFM400UA	Epidermal Growth Factor, [¹²⁵ I]-, ([¹²⁵ I]-EGF), (murine)	Endogenous	NEX160
Fibroblast Growth Factor	<i>Please inquire for receptor availability.</i>				Fibroblast Growth Factor Basic, [¹²⁵ I]-	Endogenous	NEX268
Granulocyte Macrophage-Colony Stimulating Factor	<i>Please inquire for receptor availability.</i>				Granulocyte Macrophage-Colony Stimulating Factor, [¹²⁵ I]-	Endogenous	NEX249
Growth Hormone	<i>Please inquire for receptor availability.</i>				Growth Hormone, [¹²⁵ I]-, (human)	Endogenous	NEX100
Insulin-like Growth Factor	<i>Please inquire for receptor availability.</i>				Insulin-like Growth Factor-I, [¹²⁵ I]-	Endogenous	NEX241
Transforming Growth Factor	<i>Please inquire for receptor availability.</i>				Transforming Growth Factor β 1, [¹²⁵ I]-	Endogenous	NEX267
Tumor Necrosis Factor	<i>Please inquire for receptor availability.</i>				Tumor Necrosis Factor- α , [¹²⁵ I]-	Endogenous	NEX257
Vascular Endothelial Growth Factor	<i>Please inquire for receptor availability.</i>				Vascular Endothelial Growth Factor, [¹²⁵ I]-	Endogenous	NEX328
Insulin	<i>Please inquire for receptor availability.</i>				Insulin, [¹²⁵ I]-, (porcine)	Endogenous	NEX104
					Insulin (Tyr ^{A14}), [¹²⁵ I]-, receptor grade, (porcine)	Endogenous	NEX196

Key:

* Non-recombinant

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