

Supplemental Table 2

Comprehensive search for GPCRs with atypical Asn-X-Cys sequences

Forty-four GPCRs possessing N-terminal atypical Asn-X-Cys sequences, and 11 GPCRs (red) with atypical Asn-X-Cys sequences in the extracellular regions, but no Asn-X-Ser/Thr motifs.

Gene cord	Protein name	Asn-x-Ser/Thr sequence				Asn-x-Cys sequence			
		NT	EL1	EL2	EL3	NT	EL1	EL2	EL3
Q8TDS4	GPR109A (HM74A, Niacin receptor 1)	-	-	-	-	+	-	+	-
P49019	GPR109B (HM74, Niacin receptor 2)	-	-	-	-	+	-	+	-
Q8NH80	Putative olfactory receptor 10D3	-	-	-	-	+	-	-	-
Q8NGK5	Olfactory receptor 52M1	-	-	-	-	+	-	-	-
A6NMZ5	Olfactory receptor 4C45	-	-	-	-	-	+	-	-
Q8NGF3	Olfactory receptor 51D1	-	-	-	-	-	+	-	-
Q8NH56	Olfactory receptor 52N5	-	-	-	-	-	+	-	-
A6NDL8	Olfactory receptor 6C68	-	-	-	-	-	+	-	-
P49238	CX3C chemokine receptor 1 (CX3CR1)	-	-	-	-	-	-	+	-
Q86SM5	Mas-related GPCR member G	-	-	-	-	-	-	+	-
P51677	C-C chemokine receptor type 3 (CCR3)	-	-	-	-	-	-	-	+
Q9NQ84	GPCR family C group 5 member C	-	-	+	-	+	-	-	-
O6-241	Brain-specific angiogenesis inhibitor 2	+	-	-	-	+	-	-	-
P41180	Extracellular calcium-sensing receptor	+	-	-	-	+	-	-	-
P48960	CD97 antigen	+	-	-	-	+	-	-	-
Q9HCU4	Cadherin EGF LAG seven-pass G-type receptor 2	+	-	-	-	+	-	-	-
Q9NYQ7	Cadherin EGF LAG seven-pass G-type receptor 3	+	-	-	-	+	-	-	-
Q9HBW9	EGF-TM7-latrophilin-related protein	+	-	-	-	+	-	-	-
Q14246	EGF-like module-containing mucin-like hormone receptor-like 1	+	-	-	-	+	-	+	-
Q9UHX3	EGF-like module-containing mucin-like hormone receptor-like 2	+	-	-	-	+	-	-	-
Q9BY15	EGF-like module-containing mucin-like hormone receptor-like 3	+	-	-	-	+	-	-	-
Q8IZF2	Probable G-protein coupled receptor 116	+	-	-	-	+	-	+	-
Q96K78	Probable G-protein coupled receptor 128	+	-	-	-	+	-	-	-
Q6PRD1	Probable G-protein coupled receptor 179	+	-	-	-	+	-	-	-
P32249	G-protein coupled receptor 183 (EBI2)	+	-	-	-	+	-	-	-
Q99679	Probable G-protein coupled receptor 21	+	-	-	-	+	-	-	-
Q9HC97	G-protein coupled receptor 35	+	-	-	-	+	-	-	+
Q14416	Metabotropic glutamate receptor 2 (mGluR2)	+	-	-	-	+	-	-	-
Q14832	Metabotropic glutamate receptor 3 (mGluR3)	+	-	-	-	+	-	-	-
P30550	Gastrin-releasing peptide receptor (GRP-R)	+	-	-	-	+	-	-	-
Q9BXB1	Leucine-rich repeat-containing G-protein coupled receptor 4 (G-protein coupled receptor 48)	+	-	-	-	+	-	-	-
O94910	Calcium-independent alpha-latrotoxin receptor 1	+	-	-	-	+	-	-	-
Q99705	Melanin-concentrating hormone receptor 1	+	-	-	-	+	-	-	-
P49286	Melatonin receptor type 1B (Mel-1B-R)	+	-	-	-	+	-	-	-
Q8NHC8	Olfactory receptor 2T6	+	-	-	-	+	-	-	-
P30953	Olfactory receptor 1E1	+	-	-	+	+	-	-	-
P47887	Olfactory receptor 1E2	+	-	-	+	+	-	-	-
P25101	Endothelin-1 receptor (Endothelin A receptor)	+	-	+	-	+	-	-	+
Q5T601	Probable G-protein coupled receptor 110	+	-	+	-	+	-	-	-
Q5T6X5	G-protein coupled receptor family C group 6 member A	+	-	+	-	+	-	-	-
Q86Y34	Probable G-protein coupled receptor 97	+	-	+	-	+	-	-	-

Q13255	Metabotropic glutamate receptor 1 (mGluR1)	+	-	+	-	+	-	-	-
Q9UBY5	Lysophosphatidic acid receptor 3 (LPA-3, Edg-7)	+	-	+	-	+	-	-	-
Q99677	Lysophosphatidic acid receptor 4 (LPA-4, P2Y9)	+	-	+	-	+	-	-	-
Q8IZP9	G-protein coupled receptor 64	+	-	+	+	+	-	-	-
O60242	Brain-specific angiogenesis inhibitor 3	+	+	-	-	+	-	-	-
Q9NYQ6	Cadherin EGF LAG seven-pass G-type receptor 1	+	+	-	-	+	-	-	-
Q86SQ3	Putative EGF-like module-containing mucin-like hormone receptor-like 4	+	+	-	-	+	-	-	-
P30968	Gonadotropin-releasing hormone receptor	+	+	-	-	+	-	-	-
Q8NHC5	Olfactory receptor 14A16	+	+	-	-	+	-	-	-
Q99835	Smoothed homolog (SMO) (Protein Gx)	+	+	-	+	+	-	-	-