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HCRTR1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16116c

Product Information

Application	WB, E
Primary Accession	O43613
Other Accession	P56718, P58307, Q0GBZ5, NP_001516.2
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35043
Calculated MW	47536
Antigen Region	270-298

Additional Information

Gene ID	3061
Other Names	Orexin receptor type 1, Ox-1-R, Ox1-R, Ox1R, Hypocretin receptor type 1, HCRTR1
Target/Specificity	This HCRTR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 270-298 amino acids from the Central region of human HCRTR1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HCRTR1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HCRTR1 (HGNC:4848)
Function	G-protein coupled receptor that binds the neuropeptide orexin-A with high affinity, and orexin-B with lower affinity, two peptides derived from a

common precursor, prepro-orexin (PubMed:32669442, PubMed:9491897). Its activity is mediated via a G(q)- protein-coupled pathway, which activates the phosphatidylinositol- calcium second messenger system in response to orexin-A binding (PubMed:32669442). In addition to G(q)-mediated signaling, orexin-A stimulation also promotes beta-arrestin recruitment, leading to receptor internalization (PubMed:15683363, PubMed:32669442). Plays a significant role in the regulation of food intake (By similarity).

Cellular Location Cell membrane; Multi-pass membrane protein

Background

The protein encoded by this gene is a G-protein coupled receptor involved in the regulation of feeding behavior. The encoded protein selectively binds the hypothalamic neuropeptide orexin A. A related gene (HCRTR2) encodes a G-protein coupled receptor that binds orexin A and orexin B.

References

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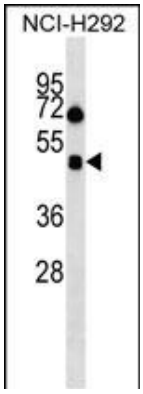
Saus, E., et al. J Psychiatr Res 44(14):971-978(2010)
Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) :
Turunen, P.M., et al. Br. J. Pharmacol. 159(1):212-221(2010)
El Firar, A., et al. FASEB J. 23(12):4069-4080(2009)

Images



HCRTR1 Antibody (Center) (Cat. #AP16116c) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the HCRTR1 antibody detected the HCRTR1 protein (arrow).