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HCRTR2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16350c

Product Information

Application	WB, E
Primary Accession	O43614
Other Accession	P56719, P58308, NP_001517.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30281
Calculated MW	50694
Antigen Region	275-304

Additional Information

Gene ID	3062
Other Names	Orexin receptor type 2, Ox-2-R, Ox2-R, Ox2R, Hypocretin receptor type 2, HCRTR2
Target/Specificity	This HCRTR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 275-304 amino acids from the Central region of human HCRTR2.
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	HCRTR2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HCRTR2 (HGNC:4849)
Synonyms	ORXR2, OX2R, OXR2

Function	G protein-coupled receptor that binds neuropeptides orexin-A and orexin-B, two neuropeptides derived from a common precursor, prepro-orexin (PubMed:26950369, PubMed:33547286, PubMed:35614071, PubMed:9491897). Upon neuropeptide ligand binding, HCRTR2 can couple with both G(q)/11 and G(i)/o heterotrimeric G proteins thereby initiating distinct downstream signaling cascades (PubMed:35614071). Involved in regulating the sleep-wake cycle (By similarity). Contributes to central regulation of glucose homeostasis (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein

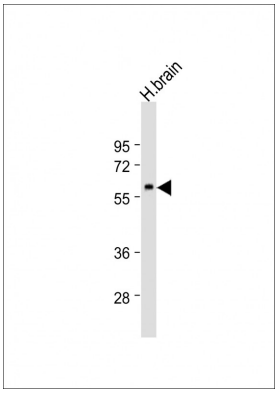
Background

The protein encoded by this gene is a G-protein coupled receptor involved in the regulation of feeding behavior. The encoded protein binds the hypothalamic neuropeptides orexin A and orexin B. A related gene (HCRTR1) encodes a G-protein coupled receptor that selectively binds orexin A.

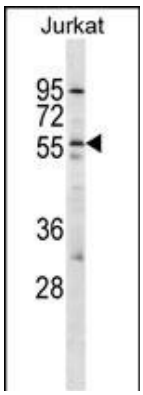
References

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Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) :
Chen, J., et al. Biochem. J. 427(3):377-390(2010)
Fellay, J., et al. PLoS Genet. 5 (12), E1000791 (2009) :
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)

Images

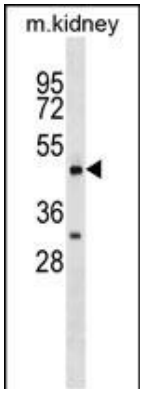


Anti-HCRTR2 Antibody (Center) at 1:1000 dilution + human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 51 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



HCRTR2 Antibody (Center) (Cat. #AP16350c) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the HCRTR2 antibody detected the HCRTR2 protein (arrow).

HCRTR2 Antibody (Center) (Cat. #AP16350c) western blot analysis in mouse kidney tissue lysates (35ug/lane).This demonstrates the HCRTR2 antibody detected the HCRTR2 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.