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HCRTR1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21007a

Product Information

Application	WB, E
Primary Accession	O43613
Reactivity	Human, Rat, Mouse
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51454
Calculated MW	47536

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 a rabbit immunized with a KLH conjugated synthetic peptide between 256-291 amino acids from the Central region of human HCRTR1.
Dilution	WB~~1:500-1:1000 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

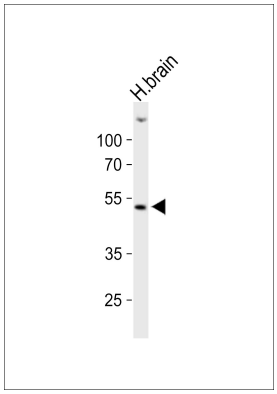
Background

Moderately selective excitatory receptor for orexin-A and, with a lower affinity, for orexin-B neuropeptide. Seems to be exclusively coupled to the G(q) subclass of heteromeric G proteins, which activates the phospholipase C mediated signaling cascade (By similarity).

References

Sakurai T.,et al.Cell 92:573-585(1998).
Peyron C.,et al.Nat. Med. 6:991-997(2000).
Olafsdottir B.R.,et al.Neurology 57:1896-1899(2001).
Yeager M.,et al.Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



Western blot analysis of lysate from human brain tissue lysate, using HCRTR1 Antibody (Center)(Cat. #AP21007a). AP21007a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

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