

# HCRT1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21007a

## Product Information

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Application	WB, E
Primary Accession	<a href="#">O43613</a>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51454
Calculated MW	47536

## Additional Information

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Gene ID	3061
Other Names	Orexin receptor type 1, Ox-1-R, Ox1-R, Ox1R, Hypocretin receptor type 1, HCRT1
Target/Specificity	This HCRT1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 256-291 amino acids from the Central region of human HCRT1.
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	HCRT1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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Name	HCRT1 ( <a href="#">HGNC:4848</a> )
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: <a href="#">32669442</a> , PubMed: <a href="#">9491897</a> ). 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

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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).

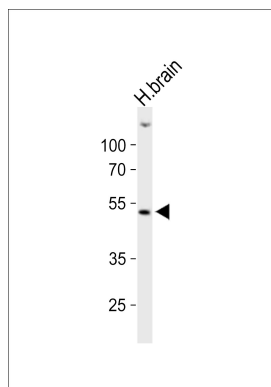
## References

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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

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Western blot analysis of lysate from human brain tissue lysate, using HCRT1R 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'.