

# MRAP2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13187c

## **Product Information**

Application Primary Accession	WB, IHC-P, E <u>096G30</u>
Other Accession	<u>NP_612418.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32862
Calculated MW	23548
Antigen Region	58-86

## **Additional Information**

Gene ID	112609
Other Names	Melanocortin-2 receptor accessory protein 2, MC2R accessory protein 2, MRAP2, C6orf117
Target/Specificity	This MRAP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-86 amino acids from the Central region of human MRAP2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	MRAP2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	MRAP2
Synonyms	C6orf117
Function	Modulator of melanocortin receptor 4 (MC4R), a receptor involved in energy

	homeostasis. Plays a central role in the control of energy homeostasis and body weight regulation by increasing ligand- sensitivity of MC4R and MC4R-mediated generation of cAMP (By similarity). May also act as a negative regulator of MC2R: competes with MRAP for binding to MC2R and impairs the binding of corticotropin (ACTH) to MC2R. May also regulate activity of other melanocortin receptors (MC1R, MC3R and MC5R); however, additional evidence is required in vivo.
Cellular Location	Cell membrane; Single-pass membrane protein. Endoplasmic reticulum membrane; Single-pass membrane protein. Note=The formation of antiparallel homo- and heterodimers suggest that N- and C-terminus can both localize in the cytoplasmic and extracellular parts, depending on the context.
Tissue Location	Expressed in the adrenal gland and brain. Not expressed in other tissues.

## Background

The specific function of this protein remains unknown.

### References

Sebag, J.A., et al. Sci Signal 3 (116), RA28 (2010) : Chan, L.F., et al. Proc. Natl. Acad. Sci. U.S.A. 106(15):6146-6151(2009) Sebag, J.A., et al. J. Biol. Chem. 284(1):610-618(2009) Lamesch, P., et al. Genomics 89(3):307-315(2007) Metherell, L.A., et al. Nat. Genet. 37(2):166-170(2005)

#### Images



MRAP2 Antibody (Center) (Cat. #AP13187c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the MRAP2 antibody detected the MRAP2 protein (arrow).



MRAP2 Antibody (Center) (Cat.

#AP13187c)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MRAP2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.