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MRAP Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9980a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8TCY5
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24667
Calculated MW	19136
Antigen Region	7-36

Additional Information

Gene ID	56246
Other Names	Melanocortin-2 receptor accessory protein, B27, Fat cell-specific low molecular weight protein, Fat tissue-specific low MW protein, MRAP, C21orf61, FALP
Target/Specificity	This MRAP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-36 amino acids from the N-terminal region of human MRAP.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	MRAP Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MRAP
Synonyms	C21orf61, FALP

Function	Modulator of melanocortin receptors (MC1R, MC2R, MC3R, MC4R and MC5R). Acts by increasing ligand-sensitivity of melanocortin receptors and enhancing generation of cAMP by the receptors. Required both for MC2R trafficking to the cell surface of adrenal cells and for signaling in response to corticotropin (ACTH). May be involved in the intracellular trafficking pathways in adipocyte cells.
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 (PubMed:20371771). Upon insulin stimulation, it is redistributed into spotty structures throughout the cytoplasm
Tissue Location	Expressed in adrenal cortex, testis, breast, thyroid, lymph node, ovary and fat. Expressed in adipose tissues

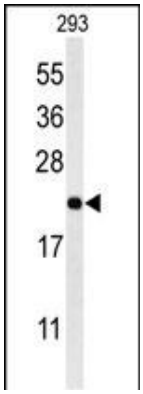
Background

MRAP encodes a melanocortin receptor-interacting protein. The encoded protein regulates trafficking and function of the melanocortin 2 receptor in the adrenal gland. The encoded protein can also modulate signaling of other melanocortin receptors. Mutations in this gene have been associated with familial glucocorticoid deficiency type 2.

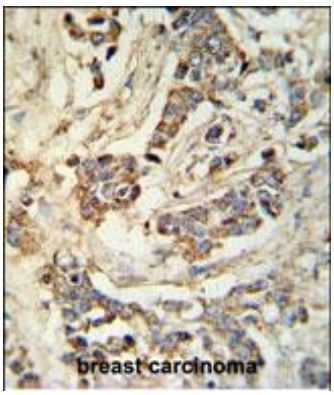
References

Dias, R.P., et al. Eur. J. Endocrinol. 162(2):357-359(2010)
Chan, L.F., et al. Proc. Natl. Acad. Sci. U.S.A. 106(15):6146-6151(2009)
Webb, T.R., et al. Endocrinology 150(2):720-726(2009)

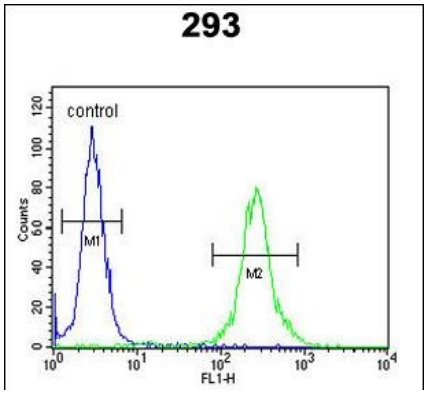
Images



Western blot analysis of MRAP Antibody (N-term) (Cat. #AP9980a) in 293 cell line lysates (35ug/lane). MRAP (arrow) was detected using the purified Pab.



MRAP Antibody (N-term) (Cat. #AP9980a) IHC analysis in formalin fixed and paraffin embedded breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the MRAP Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



MRAP Antibody (N-term) (Cat. #AP9980a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Estrogen Suppresses Interaction of Melanocortin 2 Receptor and Its Accessory Protein in the Primate Fetal Adrenal Cortex.

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