

MORG1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9575c

Product Information

Application	WB, E
Primary Accession	Q9BRX9
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24289
Calculated MW	34343
Antigen Region	126-154

Additional Information

Gene ID	84292
Other Names	WD repeat domain-containing protein 83, Mitogen-activated protein kinase organizer 1, MAPK organizer 1, WDR83, MORG1
Target/Specificity	This MORG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 126-154 amino acids from the Central region of human MORG1.
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	MORG1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	WDR83
Synonyms	MORG1
Function	Molecular scaffold protein for various multimeric protein complexes. Acts

as a module in the assembly of a multicomponent scaffold for the ERK pathway, linking ERK responses to specific agonists. At low concentrations it enhances ERK activation, whereas high concentrations lead to the inhibition of ERK activation. Also involved in response to hypoxia by acting as a negative regulator of HIF1A/HIF-1- α via its interaction with EGLN3/PHD3. May promote degradation of HIF1A. May act by recruiting signaling complexes to a specific upstream activator (By similarity). May also be involved in pre-mRNA splicing. Participates in tight junction development by regulating apico-basal polarity, a key step in tissue development and organization. Mechanistically, regulates the translocation of PAR6-aPKC from the cytoplasm to the apical surface by acting as an adapter between PARD6B AND CRB3 (PubMed:[23439680](#)). Also acts as a negative regulator of mTORC1 under nutrient-rich conditions by binding to the active Rag GTPases to inhibit mTORC1 localization to the lysosome and phosphorylation of downstream targets. This facilitates constitutive basal autophagy during nutrient availability (PubMed:[38103557](#)).

Cellular Location

Cytoplasm. Lysosome. Nucleus Note=Predominantly cytoplasmic. Partially nuclear.

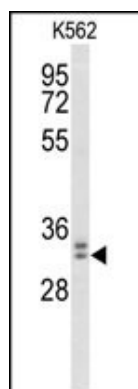
Background

MORG1 is a member of the WD-40 protein family. The protein is proposed to function as a molecular scaffold for various multimeric protein complexes. The protein associates with several components of the extracellular signal-regulated kinase (ERK) pathway, and promotes ERK activity in response to serum or other signals. The protein also interacts with egl nine homolog 3 (EGLN3, also known as PHD3) and regulates expression of hypoxia-inducible factor 1, and has been purified as part of the spliceosome.

References

- ?Haase, D., et al. Neurosci. Lett. 455(1):46-50(2009)
- ?Hopfer, U., et al. J. Biol. Chem. 281(13):8645-8655(2006)
- ?Vomastek, T., et al. Proc. Natl. Acad. Sci. U.S.A. 101(18):6981-6986(2004)

Images



Western blot analysis of MORG1 Antibody (Center) (Cat. #AP9575c) in K562 cell line lysates (35ug/lane). MORG1 (arrow) was detected using the purified Pab.

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