

MORG1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9575c

Specification

MORG1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>Q9BRX9</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	34343
Antigen Region	126-154

MORG1 Antibody (Center) - 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.

MORG1 Antibody (Center) - 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-alpha 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:<u>38103557</u>).

Cellular Location

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

MORG1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MORG1 Antibody (Center) - 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.

MORG1 Antibody (Center) - 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.

MORG1 Antibody (Center) - 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)