

**Anti-Morg1 Antibody**  
**Catalog # ABO10539****Specification**

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**Anti-Morg1 Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">Q9BRX9</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for WD repeat domain-containing protein 83(WDR83) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Morg1 Antibody - Additional Information**

**Gene ID** 84292

**Other Names**

WD repeat domain-containing protein 83, Mitogen-activated protein kinase organizer 1, MAPK organizer 1, WDR83, MORG1

**Calculated MW**

34343 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization**

Cytoplasm . Nucleus . Predominantly cytoplasmic. Partially nuclear. .

**Protein Name**

WD repeat domain-containing protein 83

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Morg1(29-43aa RAVRFNVDGNYCLTC), identical to the related mouse and rat sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the WD repeat MORG1 family.

**Anti-Morg1 Antibody - 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:<a href="http://www.uniprot.org/citations/23439680" target="\_blank">23439680</a>). 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:<a href="http://www.uniprot.org/citations/38103557" target="\_blank">38103557</a>).

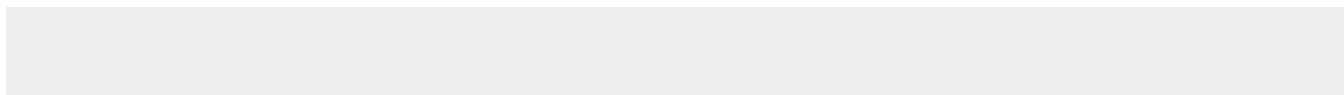
**Cellular Location**

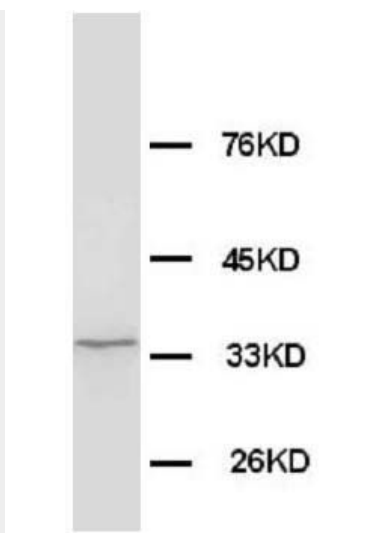
Cytoplasm. Lysosome. Nucleus Note=Predominantly cytoplasmic. Partially nuclear.

**Anti-Morg1 Antibody - Protocols**

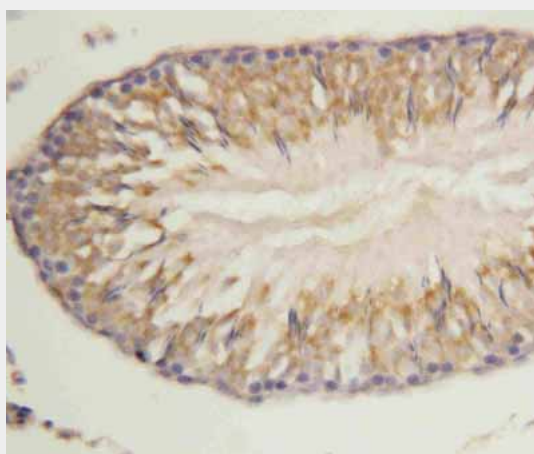
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Morg1 Antibody - Images**



Anti-Morg1 antibody, ABO10539, Western blottingWB: Rat Brain Tissue Lysate



Anti-Morg1 antibody, ABO10539, IHC(P)IHC(P): Rat Lung Tissue

### **Anti-Morg1 Antibody - Background**

MORG1(mitogen-activated protein kinase organizer 1), a member of the WD-40 protein family that was isolated as a binding partner of the extracellular signal-regulated kinase(ERK) pathway scaffold protein MP1. MORG1 specifically associates with several components of the ERK pathway, including MP1, Raf-1, MEK, and ERK, and stabilizes their assembly into an oligomeric complex. MORG1 facilitates ERK activation when cells are stimulated with lysophosphatidic acid, phorbol 12-myristate 13-acetate, or serum, but not in response to epidermal growth factor. Suppression of MORG1 by short interfering RNA leads to a marked reduction in ERK activity when cells are stimulated with serum. MORG1 is a component of a modular scaffold system that participates in the regulation of agonist-specific ERK signaling.