

# **HACE1 Antibody**

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8644b

#### **Product Information**

Application WB, E Primary Accession Q8IYU2

**Reactivity** Human, Rat, Mouse

HostMouseClonalitymonoclonalIsotypeIgG1,k

**Clone Names** 1854CT757.66.47

Calculated MW 102342

#### **Additional Information**

**Gene ID** 57531

Other Names E3 ubiquitin-protein ligase HACE1, 6.3.2.-, HECT domain and ankyrin

repeat-containing E3 ubiquitin-protein ligase 1, HACE1, KIAA1320

**Target/Specificity**This HACE1 antibody is generated from a mouse immunized with a

recombinant protein from the human region of human HACE1.

**Dilution** WB~~1:2000 E~~Use at an assay dependent concentration.

**Format** Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein G column, followed by dialysis

against PBS.

**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** HACE1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name HACE1

Synonyms KIAA1320

**Function** E3 ubiquitin-protein ligase involved in Golgi membrane fusion and

regulation of small GTPases (PubMed: 15254018, PubMed: 21988917, PubMed: 22036506, PubMed: 37537642, PubMed: 38332367). Acts as a regulator of Golgi membrane dynamics during the cell cycle: recruited to

Golgi membrane by Rab proteins and regulates postmitotic Golgi membrane fusion (PubMed:21988917). Acts by mediating ubiquitination during mitotic Golgi disassembly, ubiquitination serving as a signal for Golgi reassembly later, after cell division (PubMed:21988917). Specifically binds GTP-bound RAC1, mediating ubiquitination and subsequent degradation of active RAC1, thereby playing a role in host defense against pathogens (PubMed:22036506, PubMed:37537642, PubMed:38332367). May also act as a transcription regulator via its interaction with RARB (By similarity).

**Cellular Location** Golgi apparatus, Golgi stack membrane. Cytoplasm Endoplasmic reticulum.

Note=A significant portion localizes to the endoplasmic reticulum. Targeted to

Golgi membrane via its interaction with Rab proteins

**Tissue Location** Expressed in multiple tissues including heart, brain and kidney.

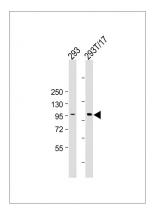
## **Background**

E3 ubiquitin-protein ligase involved in Golgi membrane fusion and regulation of small GTPases. Acts as a regulator of Golgi membrane dynamics during the cell cycle: recruited to Golgi membrane by Rab proteins and regulates postmitotic Golgi membrane fusion. Acts by mediating ubiquitination during mitotic Golgi disassembly, ubiquitination serving as a signal for Golgi reassembly later, after cell division. Specifically interacts with GTP-bound RAC1, mediating ubiquitination and subsequent degradation of active RAC1, thereby playing a role in host defense against pathogens. May also act as a transcription regulator via its interaction with RARB.

#### References

Nagase T.,et al.DNA Res. 7:65-73(2000).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mungall A.J.,et al.Nature 425:805-811(2003).
Anglesio M.S.,et al.Hum. Mol. Genet. 13:2061-2074(2004).

### **Images**



All lanes: Anti-HACE1 Antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: 293T/17 whole cell lysate e Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 102 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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