

KCMF1 antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11534B

Specification

KCMF1 antibody (C-term) - Product Information

Application WB,E
Primary Accession Q9P0]7

Other Accession O1LZE1, NP_064507.3

Reactivity Human, Mouse

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 41945
Antigen Region 280-308

KCMF1 antibody (C-term) - Additional Information

Gene ID 56888

Other Names

E3 ubiquitin-protein ligase KCMF1, 632-, FGF-induced in gastric cancer, Potassium channel modulatory factor, PCMF, ZZ-type zinc finger-containing protein 1, KCMF1, FIGC, ZZZ1

Target/Specificity

This KCMF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 280-308 amino acids from the C-terminal region of human KCMF1.

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

KCMF1 antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KCMF1 antibody (C-term) - Protein Information

Name KCMF1 {ECO:0000303|PubMed:38297121, ECO:0000312|HGNC:HGNC:20589}



Function E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme and then transfers it to targeted substrates, promoting their degradation by the proteasome (PubMed:15581609, PubMed:25582440, PubMed:34893540, PubMed:37891180, PubMed:38297121). Together with UBR4, component of the N-end rule pathway: ubiquitinates proteins bearing specific N-terminal residues that are destabilizing according to the N-end rule, leading to their degradation (PubMed:34893540, PubMed:37891180). Does not ubiquitinate proteins that are acetylated at the N-terminus (PubMed: 37891180). Together with UBR4, part of a protein quality control pathway that catalyzes ubiquitination and degradation of proteins that have been oxidized in response to reactive oxygen species (ROS): recognizes proteins with an Arg-CysO3(H) degron at the N-terminus, and mediates assembly of heterotypic 'Lys-63'-/'Lys-27'-linked branched ubiquitin chains on oxidized proteins, leading to their degradation by autophagy (PubMed: 34893540). Catalytic component of the SIFI complex, a multiprotein complex required to inhibit the mitochondrial stress response after a specific stress event has been resolved: ubiquitinates and degrades (1) components of the HRI-mediated signaling of the integrated stress response, such as DELE1 and EIF2AK1/HRI, as well as (2) unimported mitochondrial precursors (PubMed: 38297121). Within the SIFI complex, UBR4 initiates ubiquitin chain that are further elongated or branched by KCMF1 (PubMed: 38297121).

Cellular Location

Cytoplasm. Late endosome. Lysosome

Tissue Location

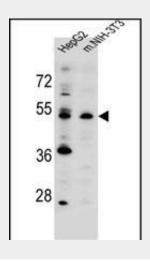
Spleen, small intestine, ovary, peripheral blood, lung, kidney and pancreas. Expressed at low levels in the thymus, prostate, testis, colon, heart, brain, placenta and liver

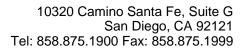
KCMF1 antibody (C-term) - Protocols

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

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

KCMF1 antibody (C-term) - Images







KCMF1 antibody (C-term) (Cat. #AP11534b) western blot analysis in HepG2,mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the KCMF1 antibody detected the KCMF1 protein (arrow).

KCMF1 antibody (C-term) - Background

Has intrinsic E3 ubiquitin ligase activity and promotes ubiquitination.

KCMF1 antibody (C-term) - References

Kreppel, M., et al. Oncogene 25(19):2795-2800(2006) Jang, J.H. FEBS Lett. 578 (1-2), 21-25 (2004) : Li, Z., et al. Biochem. Biophys. Res. Commun. 306(3):623-628(2003)