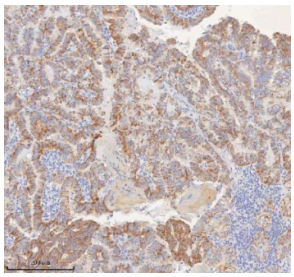
MINDY4 Antibody / MINDY lysine 48 deubiquitinase 4 / FAM63B (RQ8768)

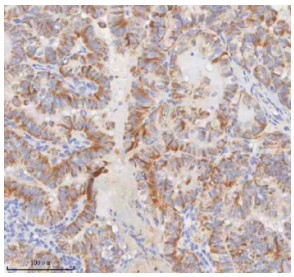
Catalog No.	Formulation	Size
RQ8768	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

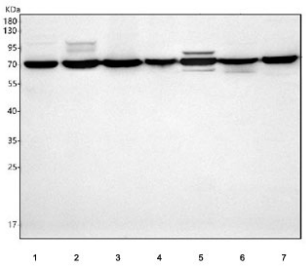
Availability	1-3 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q4G0A6
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This MINDY4 antibody is available for research use only.



IHC staining of FFPE human thyroid papillary carcinoma tissue using MINDY4 antibody. Brown chromogenic signal indicates MINDY4-positive tumor cells with predominantly cytoplasmic staining. Staining of formalin-fixed tissues requires heating tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling at RT before testing.



IHC staining of FFPE human thyroid papillary carcinoma tissue with MINDY4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human K562, 2) human A549, 3) human A431, 4) rat testis, 5) rat PC-12, 6) mouse testis and 7) mouse RAW264.7 cell lysate with MINDY4 antibody. Predicted molecular weight ~84 kDa.

Description

MINDY4 Antibody recognizes MINDY lysine 48 deubiquitinase 4, a member of the MINDY family of deubiquitinating enzymes that display high specificity for lysine 48-linked polyubiquitin chains. MINDY4, also referred to in the literature as FAM63B and MINDY family deubiquitinase 4, functions in the regulation of ubiquitin-dependent protein turnover by selectively cleaving K48-linked ubiquitin chains that typically target proteins for proteasomal degradation. This activity places MINDY4 Antibody as a useful research tool for studying ubiquitin signaling dynamics and protein stability pathways.

MINDY4 is encoded by the FAM63B gene and is primarily localized in the cytoplasm, where it interacts with ubiquitinated substrates involved in cellular quality control and signaling processes. As a deubiquitinase with chain-type selectivity, MINDY4 differs from broadly active DUBs by fine-tuning proteasomal targeting rather than globally removing ubiquitin modifications. MINDY4 Antibody can therefore support investigations into ubiquitin homeostasis, regulated protein degradation, and post-translational modification networks that control cell cycle progression and stress responses.

Studies of the MINDY protein family have highlighted their structural features that enable recognition of extended K48-linked ubiquitin chains, linking MINDY4 to pathways governing proteostasis and intracellular signaling fidelity. Altered regulation of ubiquitin-dependent degradation is implicated in cancer, neurodegeneration, and inflammatory conditions, making MINDY4 Antibody relevant for research exploring how selective deubiquitination contributes to disease-associated signaling imbalance.

In experimental settings, MINDY4 Antibody may be applied to examine expression patterns of MINDY lysine 48 deubiquitinase 4, assess its regulation under stress or signaling perturbations, and support studies focused on ubiquitin pathway specificity. By enabling detection of MINDY4 protein in relevant biological contexts, this antibody contributes to a clearer understanding of selective deubiquitination mechanisms within the broader ubiquitin proteasome system.

Application Notes

Optimal dilution of the MINDY4 antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids E414-Q685) was used as the immunogen for the MINDY4 antibody.

Storage

After reconstitution, the MINDY4 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.