

FAM134B Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	70	Rabbit	#Q9H6L5	54463

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

FAM134B Antibody recognizes endogenous levels of total FAM134B protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human FAM134B protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Family with sequence similarity 134, member B (FAM134B), also referred to as JK-1 and RETREG1, is a cis-Golgi endoplasmic reticulum (ER) transmembrane protein that plays a role in ER homeostasis and may contribute to several human diseases (1). FAM134B contains a conserved LC3-interacting domain (LIR) that facilitates binding to LC3 and GABARAP family members and targets impaired ER to the autophagosome for degradation by ER-phagy (2). Deletion of FAM134B leads to ER expansion and stress-induced apoptosis (2). Expression of FAM134B has been linked to a number of pathological conditions, including viral infection, cancer, and neuronal disorders (1). FAM134B can potentially inhibit viral infection, as demonstrated by studies of FAM134B knockouts that resulted in significantly higher rates of Ebola virus replication (3). Mutations in *FAM134B* that lead to an accumulation of misfolded proteins have also been associated with neuronal sensory disorders (2,4,5). The expression and mutational state of FAM134B can also have varying effects on cancer. The oncogenic effects of FAM134B were described in esophageal squamous carcinoma, whereas it appears to have tumor suppressor activity in colorectal cancer (6-8).

Background References

1. Islam, F. et al. (2018) *J Cell Physiol* 233, 4479-89.
2. Khaminets, A. et al. (2015) *Nature* 522, 354-8.
3. Chiramel, A.I. et al. (2016) *J Infect Dis* 214, S319-25.
4. Murphy, S.M. et al. (2012) *J Neurol Neurosurg Psychiatry* 83, 119-20.
5. Kurth, I. et al. (2009) *Nat Genet* 41, 1179-81.
6. Tang, W.K. et al. (2007) *Int J Mol Med* 19, 915-23.
7. Islam, F. et al. (2018) *Genes Chromosomes Cancer* 57, 240-51.
8. Islam, F. et al. (2017) *Hum Genet* 136, 321-37.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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