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ZF21 Antibody

Catalog # ASC11511

Product Information

Application	WB, IF, E
Primary Accession	Q9BQ24
Other Accession	NP_001185882, 312147341
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	26506
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ZF21 antibody can be used for detection of ZF21 by Western blot at 1 μg/mL. For immunofluorescence start at 20 μg/mL.

Additional Information

Gene ID	79038
Other Names	Zinc finger FYVE domain-containing protein 21, ZF21, ZFYVE21
Target/Specificity	ZFYVE21; At least two isoforms of ZF21 are known to exist; this antibody will detect both isoforms.
Reconstitution & Storage	ZF21 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	ZF21 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ZFYVE21
Function	Plays a role in cell adhesion, and thereby in cell motility which requires repeated formation and disassembly of focal adhesions. Regulates microtubule-induced PTK2/FAK1 dephosphorylation, an event important for focal adhesion disassembly, as well as integrin beta- 1/ITGB1 cell surface expression.
Cellular Location	Cell junction, focal adhesion. Cytoplasmic vesicle. Endosome. Note=Within cytoplasmic vesicles, partially colocalizes with EEA1, an endosomal marker

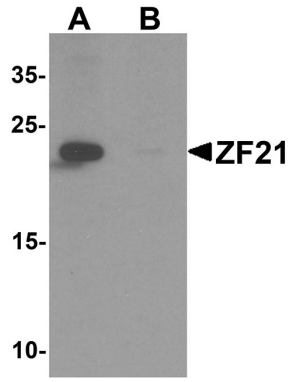
Background

ZF21 Antibody: ZF21 was initially identified as protein that could bind to the cytoplasmic tail of MT1-MMP (Membrane-type 1 matrix metalloproteinase), a potent invasion-promoting protease. ZF21 is a member of a protein family characterized by the presence of a phosphatidylinositol 3-phosphate-binding FYVE domain and regulates focal adhesions (FAs) and cell movement. Knockdown of ZF21 expression resulted in a delay of FA disassembly following induction of synchronous disassembly of FAs by nocodazole treatment, suggesting that ZF21 is involved in FA disassembly. ZF21 contains a noncanonical pleckstrin homology domain that is a possible therapeutic target to treat metastatic cancer.

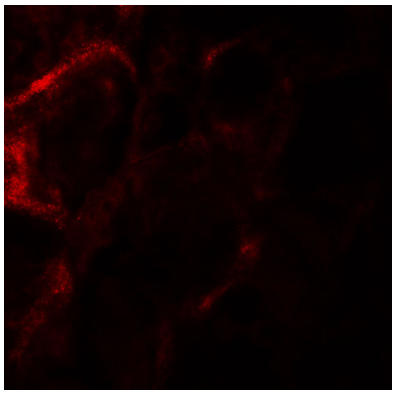
References

Uekita T, Gotoh I, Kinoshita T, et al. Membrane-type 1 matrix metalloproteinase cytoplasmic tail-binding protein-1 is a new member of the Cupin superfamily. A possible multifunctional protein acting as an invasion suppressor down-regulated in tumors. J. Biol. Chem. 2004; 279:12734-43.
Nagano M, Hoshino D, Sakamoto T, et al. ZF21 protein regulates cell adhesion and motility. J. Biol. Chem. 2010; 285:21013-22.
Nagano M, Hoshino D, Koshiba S, et al. ZF21 protein, a regulator of the disassembly of focal adhesions and cancer metastasis, contains a novel noncanonical pleckstrin homology domain. J. Biol. Chem. 2011; 286:31598-609.

Images



Western blot analysis of ZF21 in 3T3 cell tissue lysate with ZF21 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of ZF21 in human kidney tissue with ZF21 antibody at 20 µg/mL.

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