

FREM2 Antibody

Catalog # ASC11160

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q5SZK8
Other Accession	NP_997244 , 79749430
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	351167
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	FREM2 antibody was raised against a 19 amino acid peptide near the center of human FREM2. Antibody can also be used for immunocytochemistry starting at 20 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	341640
Other Names	FRAS1-related extracellular matrix protein 2, ECM3 homolog, FREM2
Target/Specificity	FREM2;
Reconstitution & Storage	FREM2 antibody can be stored at 4°C for three months and -20°C, 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	FREM2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FREM2
Function	Extracellular matrix protein required for maintenance of the integrity of the skin epithelium and for maintenance of renal epithelia (PubMed: 15838507). Required for epidermal adhesion (PubMed: 15838507). Involved in the development of eyelids and the anterior segment of the eyeballs (PubMed: 29688405 , PubMed: 30802441).
Cellular Location	Cell membrane; Single-pass type I membrane protein

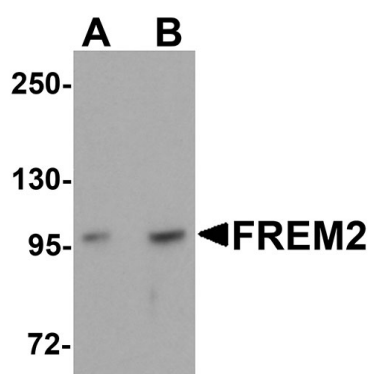
Background

FREM2 Antibody: FREM2 is a member of the FRAS1-related extracellular matrix protein family and like FREM1, mutations in the FREM2 gene are associated with Fraser syndrome. FREM2 localizes to the basement membrane, forming a ternary complex that plays a role in epidermal-dermal interactions during morphogenetic processes and is thought to be required for maintaining the integrity of the skin epithelium and the differentiated state of renal epithelia. The FREM2 gene is one of several genes whose transcription is affected by TFAP2C, a transcription factor involved in mammary development, differentiation, and oncogenesis.

References

Jadjeda S, Smyth I, Pitera JE, et al. Identification of a new gene mutated in Fraser syndrome and mouse myelencephalic blebs. *Nat. Genet.* 2005; 37:520-5.
Pavlakakis E, Makrygiannis AK, Chiokati R, et al. Differential localization profile of Fras1/Frem proteins in epithelial basement membranes of newborn and adult mice. *Histochem. Cell Biol.* 2008; 130:785-93.
Timmer JR, Mak TW, Manova K, et al. Tissue morphogenesis and vascular stability require the Frem2 protein, product of the mouse myelencephalic blebs gene. *Proc. Natl. Acad. Sci. USA* 2005; 102:11746-50.
Woodfield GW, Chen Y, Bair TB, et al. Identification of primary gene targets of TFAP2C in hormone responsive breast carcinoma cells. *Genes Chromosomes Cancer* 2010; epub.

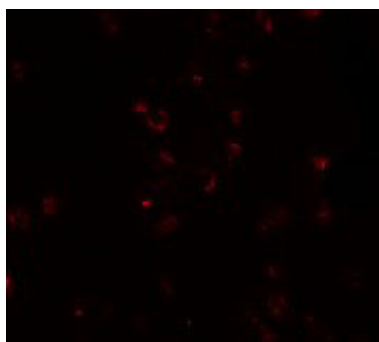
Images



Western blot analysis of FREM2 in A-20 cell lysate with FREM2 antibody at (A) 0.5 and (B) 1 $\mu\text{g/mL}$.



Immunocytochemistry of FREM2 in A-20 cells with FREM2 antibody at 20 $\mu\text{g/mL}$.



Immunofluorescence of FREM2 in A20 cells with FREM2 antibody at 20 $\mu\text{g/mL}$.

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