

FREM1 Antibody

Catalog # ASC11159

Specification

FREM1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, ICC, IF <u>O5H8C1</u> NP_659403, 122056683 Human, Mouse Rabbit Polyclonal IgG FREM1 antibody can be used for detection of FREM1 by Western blot at 0.5 - 1 μg/mL. Antibody can also be used for immunocytochemistry starting at 20 μg/mL. For immunofluorescence start at 20 μg/mL.

FREM1 Antibody - Additional Information

Gene ID Target/Specificity FREM1;

Reconstitution & Storage

FREM1 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.

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Precautions

FREM1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FREM1 Antibody - Protein Information

Name FREM1 (HGNC:23399)

Function

Extracellular matrix protein that plays a role in epidermal differentiation and is required for epidermal adhesion during embryonic development.

Cellular Location

Secreted, extracellular space, extracellular matrix, basement membrane {ECO:0000250|UniProtKB:Q684R7} Note=Localizes at the basement membrane zone of embryonic epidermis and hair follicles. {ECO:0000250|UniProtKB:Q684R7}

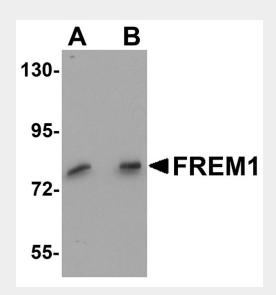


FREM1 Antibody - Protocols

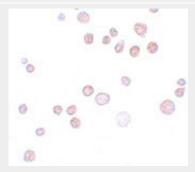
Provided below are standard protocols that you may find useful for product applications.

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

FREM1 Antibody - Images

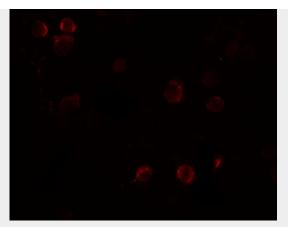


Western blot analysis of FREM1 in K562 cell lysate with FREM1 antibody at (A) 0.5 and (B) 1 $\mu g/mL$



Immunocytochemistry of FREM1 in K562 cells with FREM1 antibody at 20 μ g/mL.





Immunofluorescence of FREM1 in K562 cells with FREM1 antibody at 20 µg/mL.

FREM1 Antibody - Background

FREM1 Antibody: FREM1 is a member of the FRAS1-related extracellular matrix protein family and is thought to play a role in craniofacial and renal development. FREM1 functions as an extracellular matrix protein that is essential for epidermal adhesion during embryogenesis and may also participate in epidermal differentiation. It is recognized by cells in the embryonic skin and hair follicles through different members of the integrin family. Deficiency in the Fras1/Frem genes gives rise to the bleb phenotype, which is equivalent to the human hereditary disorder Fraser syndrome.

FREM1 Antibody - References

Smyth I, Du X, Taylor MS, et al. The extracellular matrix gene FREM1 is essential for the normal adhesion of the embryonic epidermis. Proc. Natl. Acad. Sci. USA2004; 101:13560-5. Kiyozumi D, Osada A, Sugimoto N, et al. Identification of a novel cell-adhesive protein spatiotemporally expressed in the basement membrane of mouse developing hair follicle. Exp. Cell Res.2005; 306:9-23.

Petrou P, Makrygiannis AK, Chalepakis G, et al. The FRAS1/FREM family of extracellular matrix proteins: structure, function, and association with Fraser syndrome and the mouse bleb phenotype. Connect. Tissue Res.2008; 49:277-82.

Zhang X, Shephard F, Kim HB, et al. TILRR, a novel IL-1RI co-receptor, potentiates MyD88 recruitment to control Ras-dependent amplification of NF-kappaB J. Biol. Chem.2010; 285:7222-32.