10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Kindlin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56543

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9BQL6
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	77437
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Kindlin
Epitope Specificity	601-677/677
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm > cytoskeleton. Cell junction > focal adhesion. Cell projection > ruffle membrane. Constituent of focal adhesions. Localized at the basal aspect of skin keratinocytes, close to the cell membrane. Colocalizes with filamentous actin. Upon TGFB1 treatment, it localizes to membrane ruffles.
SIMILARITY	Belongs to the kindlin family. Contains 1 FERM domain. Contains 1 PH domain.
DISEASE	Defects in FERMT1 are the cause of Kindler syndrome (KINDS) [MIM:173650]. An autosomal recessive skin disorder characterized by skin blistering, photosensitivity, progressive poikiloderma, and extensive skin atrophy. Additional clinical features include gingival erosions, ocular, esophageal, gastrointestinal and urogenital involvement, and an increased risk of mucocutaneous malignancy. Note=Although most FERMT1 mutations are predicted to lead to premature termination of translation, and to loss of FERMT1 function, significant clinical variability is observed among patients. There is an association of FERMT1 missense and in-frame deletion mutations with milder disease phenotypes, and later onset of complications (PubMed:21936020).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the fermitin family, and contains a FERM domain and a pleckstrin homology domain. The encoded protein is involved in integrin signaling and linkage of the actin cytoskeleton to the extracellular matrix. Mutations in this gene have been linked to Kindler syndrome. [provided by RefSeq, Dec 2009]

Additional Information

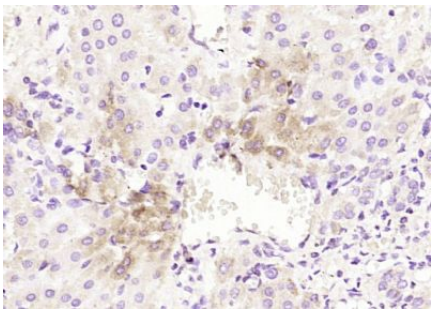
Gene ID	55612

Other Names	Fermitin family homolog 1, Kindlerin, Kindlin syndrome protein, Kindlin-1, Unc-112-related protein 1, FERMT1, C20orf42, KIND1, URP1
Target/Specificity	Expressed in brain, skeletal muscle, kidney, colon, adrenal gland, prostate, and placenta. Weakly or not expressed in heart, thymus, spleen, liver, small intestine, bone marrow, lung and peripheral blood leukocytes. Overexpressed in some colon and lung tumors. In skin, it is localized within the epidermis and particularly in basal keratocytes. Not detected in epidermal melanocytes and dermal fibroblasts.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

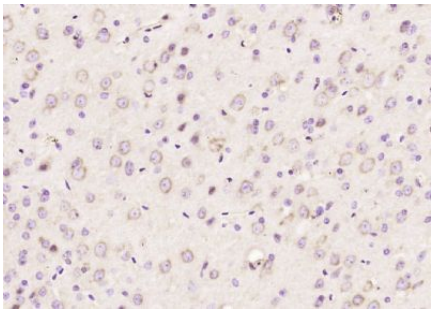
Protein Information

Name	FERMT1
Synonyms	C20orf42, KIND1, URP1
Function	Involved in cell adhesion. Contributes to integrin activation. When coexpressed with talin, potentiates activation of ITGA2B. Required for normal keratinocyte proliferation. Required for normal polarization of basal keratinocytes in skin, and for normal cell shape. Required for normal adhesion of keratinocytes to fibronectin and laminin, and for normal keratinocyte migration to wound sites. May mediate TGF-beta 1 signaling in tumor progression.
Cellular Location	Cytoplasm, cytoskeleton. Cell junction, focal adhesion. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Note=Constituent of focal adhesions Localized at the basal aspect of skin keratinocytes, close to the cell membrane. Colocalizes with filamentous actin. Upon TGFB1 treatment, it localizes to membrane ruffles
Tissue Location	Expressed in brain, skeletal muscle, kidney, colon, adrenal gland, prostate, and placenta. Weakly or not expressed in heart, thymus, spleen, liver, small intestine, bone marrow, lung and peripheral blood leukocytes. Overexpressed in some colon and lung tumors. In skin, it is localized within the epidermis and particularly in basal keratocytes. Not detected in epidermal melanocytes and dermal fibroblasts.

Images



Paraformaldehyde-fixed, paraffin embedded (human liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Kindlin) Polyclonal Antibody, Unconjugated (AP56543) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Kindlin) Polyclonal Antibody, Unconjugated (AP56543) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.