



Rabbit Anti-FBP17 antibody

SL13147R

Product Name:	FBP17
Chinese Name:	甲精Binding protein17抗体
Alias:	FBP1; FBP17; FNBP1; FNBP1_HUMAN; Formin binding protein 1; Formin binding protein 17; Formin-binding protein 1; Formin-binding protein 17; hFBP17; KIAA0554; MGC126804.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Zebrafish,Sheep,Xenopus laevis, Pufferfish (Fugu)
Applications:	ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	71kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FBP17:331-430/617
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	FNBP1 is a 617 amino acid protein that localizes to a variety of locations within the cell, including the cytoplasm, cytoskeleton, lysosome and the cell cortex, and contains one FCH domain, one REM repeat and one SH3 domain. Expressed at high levels in respiratory, reproductive and urinary systems, as well as in brown adipose tissue and epithelial cells of the gastrointestinal tract, FNBP1 interacts with Rho 7 and links the Actin cytoskeleton with Rho 7 signaling, playing a crucial role in membrane tubulation

and cytoskeletal reorganization during endocytosis. Additionally, FNBP1, which exists as four alternatively spliced isoforms, enhances Actin polymerization and promotes membrane invagination and the formation of tubules. Chromosomal aberrations in the FNBP1 gene are associated with acute leukemias, suggesting a role for defective FNBP1 in carcinogenesis.

Function:

May act as a link between RND2 signaling and regulation of the actin cytoskeleton (By similarity). Required to coordinate membrane tubulation with reorganization of the actin cytoskeleton during endocytosis. Binds to lipids such as phosphatidylinositol 4,5-bisphosphate and phosphatidylserine and promotes membrane invagination and the formation of tubules. Also enhances actin polymerization via the recruitment of WASL/N-WASP, which in turn activates the Arp2/3 complex. Actin polymerization may promote the fission of membrane tubules to form endocytic vesicles. May be required for the lysosomal retention of FASLG/FASL.

Subunit:

Interacts specifically with GTP-bound RND2 and CDC42. Interacts with PDE6G and microtubules (By similarity). Homodimerizes, the dimers can polymerize end-to-end to form filamentous structures. Interacts with AKAP9, ARHGAP17, DAAM1, DIAPH1, DIAPH2, DNM1, DNM2, DNM3, FASLG/FASL, SNX2 and WASL/N-WASP. May interact with TNKS.

Subcellular Location:

Cytoplasm. Cytoplasm > cytoskeleton. Cytoplasm > cell cortex. Lysosome. Cytoplasmic vesicle. Cell membrane. Enriched in cortical regions coincident with F-actin. Also localizes to endocytic vesicles and lysosomes.

Tissue Specificity:

Very highly expressed in the epithelial cells of the gastrointestinal tract, respiratory, reproductive and urinary systems. Also highly expressed in brown adipose tissue, cardiomyocytes, enteric ganglia and glucagon producing cells of the pancreas. Expressed in germ cells of the testis and all regions of the brain.

DISEASE:

Note=A chromosomal aberration involving FNBP1 is found in acute leukemias. Translocation t(9;11)(q34;q23) with MLL. The relatively low incidence of the MLL-FNBP1 fusion protein in acute leukemia may reflect the marginal capacity of this fusion protein to induce cellular transformation.

Similarity:

Belongs to the FNBP1 family.
Contains 1 FCH domain.
Contains 1 REM (Hr1) repeat.
Contains 1 SH3 domain.

SWISS:
Q96RU3

Gene ID:
23048

Database links:

[Entrez Gene: 23048](#)Human

[Entrez Gene: 14269](#)Mouse

[Entrez Gene: 192348](#)Rat

[Omim: 606191](#)Human

[SwissProt: Q96RU3](#)Human

[SwissProt: Q80TY0](#)Mouse

[SwissProt: Q8R511](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.