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

FLRT3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54837

Product Information

Application	WB, E
Primary Accession	Q9NZU0
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	73004
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FLRT3
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	Membrane; Single-pass type I membrane protein (Probable).
SIMILARITY	Contains 1 fibronectin type-III domain. Contains 10 LRR (leucine-rich) repeats. Contains 1 LRRCT domain. Contains 1 LRRNT domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	FLRT3 is a 649 amino acid single-pass type I membrane protein that contains one fibronectin type-III domain and ten leucine-rich repeats and belongs to the fibronectin leucine rich transmembrane protein (FLRT) family. Expressed in heart, liver, lung, kidney, pancreas, brain, placenta and skeletal muscle, FLRT3 is thought to be involved in receptor signaling events and may play a role in both cell adhesion neurite outgrowth. Defects in the gene encoding mouse FLRT3 may lead to ventral closure, headfold fusion and endoderm migration defects, suggesting that FLRT3 is important for proper cell differentiation and development. FLRT3 exists as multiple alternatively spliced isoforms that are encoded by a gene which maps to human chromosome 20.

Additional Information

Gene ID	23767
Other Names	Leucine-rich repeat transmembrane protein FLRT3, Fibronectin-like domain-containing leucine-rich transmembrane protein 3, FLRT3, KIAA1469
Target/Specificity	Expressed in kidney, brain, pancreas, skeletal muscle, lung, liver, placenta, and heart.
Dilution	WB=1:500-2000,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

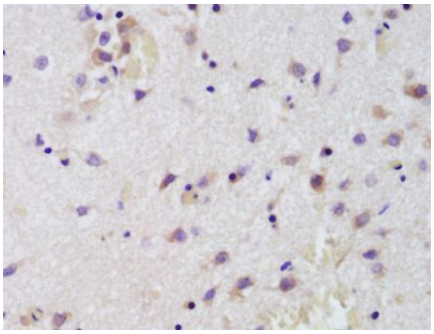
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	FLRT3
Synonyms	KIAA1469
Function	Functions in cell-cell adhesion, cell migration and axon guidance, exerting an attractive or repulsive role depending on its interaction partners. Plays a role in the spatial organization of brain neurons. Plays a role in vascular development in the retina (By similarity). Plays a role in cell-cell adhesion via its interaction with ADGRL3 and probably also other latrophilins that are expressed at the surface of adjacent cells (PubMed:26235030). Interaction with the intracellular domain of ROBO1 mediates axon attraction towards cells expressing NTN1. Mediates axon growth cone collapse and plays a repulsive role in neuron guidance via its interaction with UNC5B, and possibly also other UNC-5 family members (By similarity). Promotes neurite outgrowth (in vitro) (PubMed:14706654). Mediates cell-cell contacts that promote an increase both in neurite number and in neurite length. Plays a role in the regulation of the density of glutamaergic synapses. Plays a role in fibroblast growth factor-mediated signaling cascades. Required for normal morphogenesis during embryonic development, but not for normal embryonic patterning. Required for normal ventral closure, headfold fusion and definitive endoderm migration during embryonic development. Required for the formation of a normal basement membrane and the maintenance of a normal anterior visceral endoderm during embryonic development (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q8BGT1}; Single-pass membrane protein {ECO:0000250|UniProtKB:Q8BGT1} Presynaptic cell membrane {ECO:0000250|UniProtKB:Q8BGT1}; Single-pass membrane protein {ECO:0000250|UniProtKB:Q8BGT1}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q8BGT1}. Cell junction, focal adhesion {ECO:0000250|UniProtKB:Q8BGT1}. Secreted {ECO:0000250|UniProtKB:Q8BGT1}. Cell projection, axon {ECO:0000250|UniProtKB:Q8BGT1}. Cell projection, growth cone membrane {ECO:0000250|UniProtKB:Q8BGT1}. Note=Detected on dendritic punctae that colocalize in part with glutamaergic synapses, but not with GABAergic synapses. Proteolytic cleavage in the juxtamembrane region gives rise to a shedded ectodomain. {ECO:0000250|UniProtKB:B1H234, ECO:0000250|UniProtKB:Q8BGT1}
Tissue Location	Expressed in kidney, brain, pancreas, skeletal muscle, lung, liver, placenta, and heart

Images

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;



Incubation: Anti-FLRT3 Polyclonal Antibody, Unconjugated(AP54837) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining