

## **Anti-DYLT1 antibody**



**Description** Unconjugated Rabbit polyclonal to DYLT1

Model STJ190776

**Host** Rabbit

**Reactivity** Human

**Applications** ELISA, WB

**Gene ID** <u>6993</u>

Gene Symbol DYNLT1

**Dilution range** WB 1:500-2000 ELISA 1:5000-20000

**Specificity** DYLT1 Polyclonal Antibody detects endogenous levels of protein.

**Tissue Specificity** Expressed in heart, placenta, skeletal muscle kidney, pancreas, spleen,

prostate, testis, ovary, ileum and colon. Expressed in lung endothelial and

smooth muscle cells (at protein level).

**Purification** DYLT1 antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Dynein light chain Tctex-type 1 Protein CW-1 T-complex testis-specific

protein 1 homolog

Molecular Weight 12 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:11697OMIM:601554</u>

Alternative Names Dynein light chain Tctex-type 1 Protein CW-1 T-complex testis-specific

protein 1 homolog

**Function** Acts as one of several non-catalytic accessory components of the cytoplasmic

dynein 1 complex that are thought to be involved in linking dynein to cargos and to adapter proteins that regulate dynein function. Cytoplasmic dynein 1 acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules. Binds to transport cargos and is involved in apical cargo transport such as rhodopsin-bearing vesicles in polarized epithelia. May also be a accessory component of axonemal dynein.; Plays a role in neuronal morphogenesis; the function is independent of cytoplasmic dynein and seems to be coupled to regulation of the actin cytoskeleton by enhancing Rac1 activity. The function in neurogenesis may be regulated by association with a G-protein beta-gamma dimer. May function as a receptorindependent activator of heterotrimeric G-protein signaling; the activation appears to be independent of a nucleotide exchange. Plays a role in regulating neurogenesis; inhibits the genesis of neurons from precursor cells during cortical development presumably by antagonizing ARHGEF2. Involved in the regulation of mitotic spindle orientation. Unrelated to the role in retrograde microtubule-associated movement may play a role in the dimerization of cytoplasmic proteins/domains such as for ACVR2B. Binds to the cytoplasmic domain of ACVR2B and, in vitro, inhibits ACVR2B signaling. (Microbial infection) Is involved in intracellular targeting of D-type retrovirus gag

polyproteins to the cytoplasmic assembly site.

**Cellular Localization** Golgi apparatus Cytoplasm Cytoplasm, cytoskeleton, spindle. Localizes to

mitotic spindles.

Post-translational Modifications Phosphorylated by BMPR2; the phosphorylation is abolished by BMPR2 mutations in exon 12 which lead to truncated forms of BMPR2 and which are linked to primary pulmonary hypertension (PPH1) [MIM:178600]. The phosphorylation status is proposed to regulate the association with the cytoplasmic dynein complex and may have role in cytoplasmic dynein cargo

release.