ARG42372
anti-LARGE1 antibody [LARGE-02]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [LARGE-02] recognizes LARGE1
Tested Reactivity	Hu
Tested Application	FACS, WB
Specificity	The mouse monoclonal antibody LARGE-02 recognizes human LARGE1, a glycosyltransferase expressed mainly in the Golgi apparatus. Crossreactivity with LARGE2 was not determined.
Host	Mouse
Clonality	Monoclonal
Clone	LARGE-02
Isotype	IgG2b
Target Name	LARGE1
Species	Human
Immunogen	Recombinant fragment corresponding to aa. 35-142 of Human LARGE1.
Conjugation	Un-conjugated
Alternate Names	EC 2.4.1.-; MDC1D; EC 2.4.-.-; Acetylglucosaminyltransferase-like 1A; MDDGA6; MDDGB6; Glycosyltransferase-like protein LARGE1; EC 2.4.2.-

Application Instructions

Application table

Application	Dilution
FACS	1 - 5 µg/ml
WB	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	LARGE
Gene Full Name	like-glycosyltransferase
Background	This gene encodes a member of the N-acetylglucosaminyltransferase gene family. It encodes a glycosyltransferase which participates in glycosylation of alpha-dystroglycan, and may carry out the synthesis of glycoprotein and glycosphingolipid sugar chains. It may also be involved in the addition of a repeated disaccharide unit. The protein encoded by this gene is the glycotransferase that adds the final xylose and glucuronic acid to alpha-dystroglycan and thereby allows alpha-dystroglycan to bind ligands including laminin 211 and neurexin. Mutations in this gene cause several forms of congenital muscular dystrophy characterized by cognitive disability and abnormal glycosylation of alpha-dystroglycan. Alternative splicing of this gene results in multiple transcript variants that encode the same protein. [provided by RefSeq, May 2018]
Function	Bifunctional glycosyltransferase with both xylosyltransferase and beta-1,3-glucuronyltransferase activities involved in the biosynthesis of the phosphorylated O-mannosyl trisaccharide (N-acetylgalactosamine-beta-3-N-acetylglucosamine-beta-4-(phosphate-6-)mannose), a carbohydrate structure present in alpha-dystroglycan (DAG1) (PubMed:22223806). Phosphorylated O-mannosyl trisaccharid is required for binding laminin G-like domain-containing extracellular proteins with high affinity and plays a key role in skeletal muscle function and regeneration. LARGE elongates the glucuronyl-beta-1,4-xylose-beta disaccharide primer structure initiated by B3GNT1/B4GAT1 by adding repeating units [-3-Xylose-alpha-1,3-GlcA-beta-1-] to produce a heteropolysaccharide (PubMed:25279699). [UniProt]
Calculated Mw	88 kDa
Cellular Localization	Golgi apparatus membrane; Single-pass type II membrane protein. [UniProt]