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LARGE Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21980c

Specification

LARGE Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q95461
Other Accession	Q66PG4, Q66PG1, Q8N3Y3, Q66PG3, Q66PG2, Q9Z1M7
Reactivity	**Human**
Predicted	**Chicken, Zebrafish, Mouse**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**88066**

LARGE Antibody (Center) - Additional Information

Gene ID 9215

Other Names
Glycosyltransferase-like protein LARGE1, 2.4.-.-, Acetylglucosaminyltransferase-like 1A, Xylosyltransferase LARGE, 2.4.2.-, Beta-1, 3-glucuronyltransferase LARGE, 2.4.1.-, LARGE, KIAA0609, LARGE1

Target/Specificity
This LARGE antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 365-398 amino acids from the Central region of human LARGE.

Dilution
WB~~1:2000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
LARGE Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

LARGE Antibody (Center) - Protein Information

Name LARGE1 (HGNC:6511)

Synonyms KIAA0609, LARGE

Function Bifunctional glycosyltransferase with both alpha-1,3- xylosyltransferase and beta-1,3-glucuronyltransferase activities involved in the maturation of alpha-dystroglycan (DAG1) by glycosylation leading to DAG1 binding to laminin G-like domain- containing extracellular proteins with high affinity (PubMed:22223806, PubMed:15752776, PubMed:15661757, PubMed:25279699, PubMed:25279697, PubMed:23125099, PubMed:21987822). Elongates the glucuronyl-beta-1,4- xylose-beta disaccharide primer structure initiated by B4GAT1 by adding repeating units [-3-Xylose-alpha-1,3-GlcA-beta-1-] to produce a heteropolysaccharide (PubMed:22223806, PubMed:25279699, PubMed:25279697, PubMed:25138275, PubMed:32975514, PubMed:23125099). Requires the phosphorylation of core M3 (O-mannosyl trisaccharide) by POMK to elongate the glucuronyl-beta-1,4-xylose-beta disaccharide primer (PubMed:21987822). Plays a key role in skeletal muscle function and regeneration (By similarity).

Cellular Location
Golgi apparatus membrane; Single-pass type II membrane protein

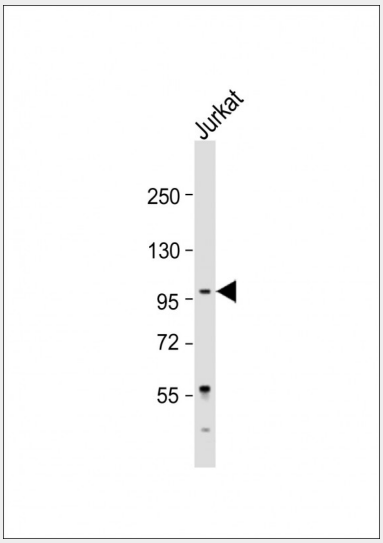
Tissue Location
Ubiquitous. Highest expression in heart, brain and skeletal muscle.

LARGE Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LARGE Antibody (Center) - Images



Anti-LARGE Antibody (Center) at 1:2000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.

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Predicted band size : 88 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

LARGE Antibody (Center) - Background

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).

LARGE Antibody (Center) - References

Peyrard M.,et al.Proc. Natl. Acad. Sci. U.S.A. 96:598-603(1999).
Nagase T.,et al.DNA Res. 5:31-39(1998).
Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).
Dunham I.,et al.Nature 402:489-495(1999).
Fujimura K.,et al.Biochem. Biophys. Res. Commun. 329:1162-1171(2005).