

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

LARGE Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O95461
Other Accession	O66PG4 , O66PG1 , O8N3Y3 , O66PG3 , O66PG2 , O9Z1M7
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

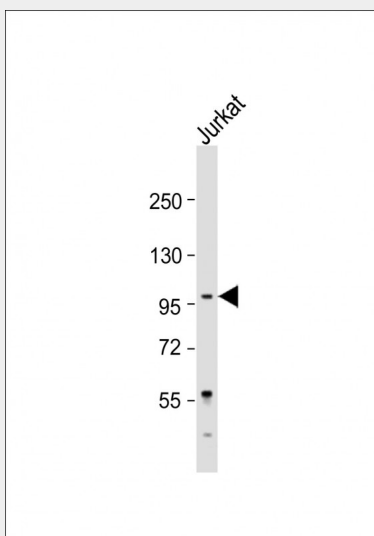
Tissue Location

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 Cytometry](#)
- [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.

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).