

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

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**LARGE Antibody (Center) - Product Information**

|                   |   |
|-------------------|---|
| Application       | WB,E  |
| Primary Accession | <a href="#">O95461</a>  |
| Other Accession   | <a href="#">O66PG4</a> , <a href="#">O66PG1</a> , <a href="#">O8N3Y3</a> , <a href="#">O66PG3</a> , <a href="#">O66PG2</a> , <a href="#">O9Z1M7</a> |
| 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:[15661757](#), PubMed:[15752776](#), PubMed:[21987822](#), PubMed:[22223806](#), PubMed:[23125099](#), PubMed:[25279697](#), PubMed:[25279699](#)). 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:[23125099](#), PubMed:[25138275](#), PubMed:[25279697](#), PubMed:[25279699](#), PubMed:[32975514](#)). 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

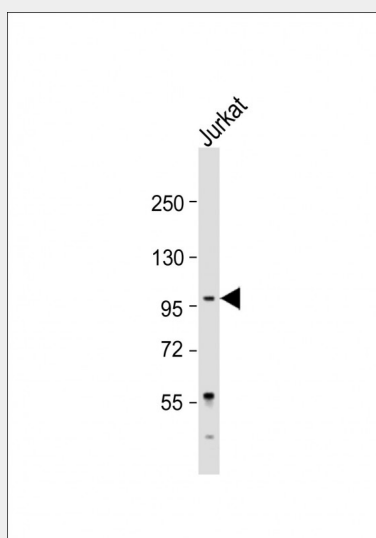
**Tissue Location**

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).