

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Dystroglycan in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Dystroglycan Gln28-Val749 Accession # Q14118
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Knockout Validated	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Dystroglycan, also DAG-1 (Dystrophin-associated glycoprotein 1) is a 180-200 kDa heterodimeric adhesion molecule that links the cell cytoskeleton to the extracellular matrix. It is found on skeletal muscle, cardiac muscle, fibroblasts, smooth muscle and keratinocytes. DAG-1 binds multiple matrix molecules, including laminin-1 and -2, agrin, and perlecan. Intracellularly, the cytoplasmic tail of DAG-1 contributes to a large 400 kDa complex that interacts with the cytoskeleton. The human DAG-1 precursor is a type I transmembrane protein 895 amino acids (aa) in length. It contains a 27 aa signal sequence plus an 868 aa proform that undergoes autocatalysis to generate a 626 aa α -chain (aa 28-653), and a 242 aa β -chain. Mature DAG-1 is a heterodimer composed of noncovalently linked α - and β -chains. The α -chain possesses one potential Ig-like domain (aa 64-162), a mucin-like region (aa 316-485), and a peptidase S72 domain (aa 500-733). It is O-glycosylated and runs from 100-160 kDa in SDS-PAGE. The β -chain is N-glycosylated and runs at 42-44 kDa in SDS-Page. It possesses a short 95 aa extracellular region (aa 654-749) plus a 120 aa cytoplasmic domain (aa 776-895). Membrane cleavage of the β -chain causes dissociation of the heterodimer and generates a 30 kDa truncated form. Over aa 28-749, human DAG-1 shares 93% aa identity with mouse DAG-1.

PRODUCT SPECIFIC NOTICES

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