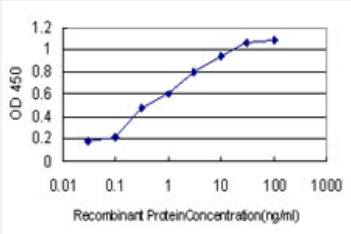
DAG1 monoclonal antibody (M01), clone 2A3

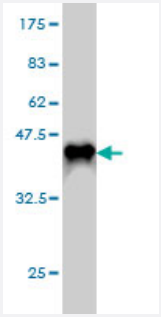
Catalog # H00001605-M01 Size 100 ug

Applications



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged DAG1 is approximately 0.03ng/ml as a capture antibody.



Western Blot detection against Immunogen (37.84 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant DAG1.
Immunogen	DAG1 (AAH12740, 31 a.a. ~ 140 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	WPSEPSEAVRDWENQLEASMHSVLSDLHEAVPTVVGIPDGTAVVGRSFRVTIPTDLIASSGDIIKV SAAGKEALPSWLHWDSQSHTLEGLPLDTDKGVHYISVSATRLGA
Host	Mouse
Reactivity	Human

Interspecies Antigen Sequence	Mouse (92); Rat (92)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

  Protocol Download

- Sandwich ELISA (Recombinant protein)

  Detection limit for recombinant GST tagged DAG1 is approximately 0.03ng/ml as a capture antibody.

  Protocol Download

- ELISA

Gene Info — DAG1

Entrez GeneID	1605
GeneBank Accession#	BC012740
Protein Accession#	AAH12740
Gene Name	DAG1
Gene Alias	156DAG, A3a, AGRNR, DAG
Gene Description	dystroglycan 1 (dystrophin-associated glycoprotein 1)
Omim ID	128239
Gene Ontology	Hyperlink

Gene Summary	Dystroglycan is a laminin binding component of the dystrophin-glycoprotein complex which provides a linkage between the subsarcolemmal cytoskeleton and the extracellular matrix. Dystroglycan 1 is a candidate gene for the site of the mutation in autosomal recessive muscular dystrophies. The dramatic reduction of dystroglycan 1 in Duchenne muscular dystrophy leads to a loss of linkage between the sarcolemma and extracellular matrix, rendering muscle fibers more susceptible to necrosis. Dystroglycan also functions as dual receptor for agrin and laminin-2 in the Schwann cell membrane. The muscle and nonmuscle isoforms of dystroglycan differ by carbohydrate moieties but not protein sequence. Alternative splicing results in multiple transcript variants
Other Designations	alpha-dystroglycan|beta-dystroglycan|dystroglycan 1|dystrophin-associated glycoprotein-1

Publication Reference

- Type 2 Diabetes Biomarkers and Uses Thereof.

  Eustache Paramithiotis, Marc Prentki, Rèmi Rabasa-Ihoret, Pascal Croteau, Joel Lanoix, Murthy S. R. Madiraju, Érik Joly

  United States Patent Application Publication 2015 Nov; [Epub].

  Application: IF, WB, Human, Mouse, Rat, Islets, INS832/13, MIN6 cells

- The N-terminal domain of ?-dystroglycan, released as a 38kDa protein, is increased in cerebrospinal fluid in patients with Lyme neuroborreliosis.

  Hesse C, Johansson I, Mattsson N, Bremell D, Andreasson U, Halim A, Anckarsater R, Blennow K, Anckarsater H, Zetterberg H, Larson G, Hagberg L, Grahn A.

  Biochemical and Biophysical Research Communications 2011 Sep; 412(3):494.

  Application: ELISA, As a standard

Pathway

- Arrhythmogenic right ventricular cardiomyopathy (ARVC)
- ECM-receptor interaction
- Hypertrophic cardiomyopathy (HCM)

Disease

- Bronchopulmonary Dysplasia
- Cardiovascular Diseases
- Crohn Disease

- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Schizophrenia