

anti-Human alpha-Glucosidase Monoclonal Antibody | anti-Trad_1739 antibody

Mouse anti alpha-Glucosidase

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA77501	Mouse (Balb/c)	Human	Immunoblot, Western Blot, Immunohistochemistry

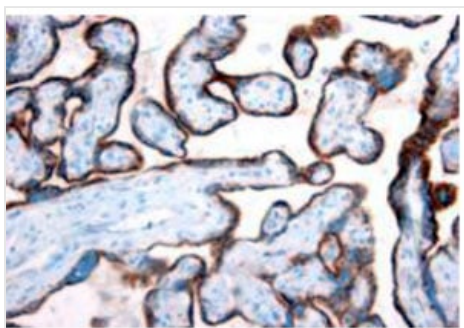
PRODUCT SYNONYMS

alpha-Glucosidase; Monoclonal Antibody; Mouse anti alpha-Glucosidase; anti-Trad_1739 antibody

PRODUCT SPECIFICATIONS

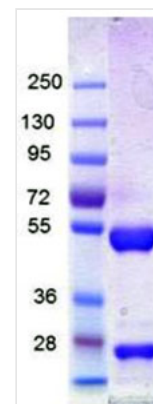
Host	Mouse (Balb/c)
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	43G7
Specificity	Reacts with the two major bands with apparent molecular weights of 76 000 and 70 000, the band with a molecular weight of about 94000 and minor bands with apparent molecular weights of less than 67 000, when analyzing a-glucosidase isolated from placenta by polyacrylamide gel electrophoresis in the presence of SDS and a reducing agent.
Form/Format	Each vial contains 100 ul 1 mg/ml purified monoclonal antibody in PBS containing 0.09% sodium azide.
Applicable Applications for anti-Trad_1739 antibody	IB (Immunoblot), IHC (Immunohistochemistry)
Source Note	43G7 is a Mouse monoclonal IgG1 antibody derived by fusion of Mouse myeloma cells with spleen cells from a Balb/cHeA Mouse hyperimmunized with purified acid alpha-glucosidase from Human placenta.
Preparation and Storage	Store at 4 degree C, or in small aliquots at -20 degree C.

IMAGES



IHC (Immunohistochemistry)

Immunohistochemistry on paraffin-embedded sections of human placenta.



SDS-PAGE

SDS-polyacrylamide gel electrophoresis

ADDITIONAL INFORMATION

Related Product Information for anti-Trad_1739 antibody	Lysosomal alpha -glucosidase, like all other lysosomal enzymes of which the 'life-cycle' has been studied, is synthesized as a large precursor that is processed to mature forms of lower molecular mass. Acid alpha -glucosidase Catalyzes the hydrolysis of the alpha1 -> 4 and alpha1 -> 6 glucosidic linkages in glycogen and the alpha1 -> 4 glucosidic linkage in maltose and artificial substrates like p-nitrophenyl- alpha -glucoside. The enzyme is deficient in patients with Glycogenosis Type II (Pompe's disease). Pompe disease (also called Glycogen storage disease type II (GSD II) or acid maltase deficiency) is an autosomal recessive metabolic disorder which damages muscle and nerve cells throughout the body. It is caused by an accumulation of glycogen in the lysosome due to deficiency of the lysosomal acid alpha-glucosidase enzyme. It is the only glycogen storage disease with a defect in lysosomal metabolism. The build-up of glycogen causes progressive muscle weakness (myopathy) throughout the body and affects various body tissues, particularly in the heart, skeletal muscles, liver and nervous system. There are exceptions but levels of alpha-glucosidase determines the type of GSD II an individual may have. More alpha glucosidase present in the individual's muscles means symptoms occur later in life and progress more slowly. GSD II is broadly divided into two onset forms based on the age symptoms occur: Infantile-onset form is usually identified at 4-8 months; muscles appear normal but are limp and weak preventing them from lifting their head or rolling over. As the disease progresses heart muscles thicken and progressively fail. Without treatment death usually occurs due to heart failure and respiratory weakness. Late/late onset form occurs later than one to two years and progresses more slowly than Infantile-onset form. One of the first symptoms is a progressive decrease in muscle strength starting with the legs and moving to smaller muscles in the trunk and arms, such as the diaphragm and other muscles required for breathing. Respiratory failure is the most common cause of death. Enlargement of the heart muscles and rhythm disturbances are not significant features but do occur in some cases. The disease is caused by a mutation in a gene (acid alpha-glucosidase: also known as acid maltase) on long arm of chromosome 17 at 17q25.2-q25.3 (base pair 75,689,876 to 75,708,272). The number of mutations described is currently (in 2010) 289 with 67 being non-pathogenic mutations and 197 pathogenic mutations. The remainder are still being evaluated for their association with disease.
Product Categories/Family for anti-Trad_1739 antibody	Tumour marker
References	John Hilkens, Joseph M. Tager, Femke Buijs, Betty Brouwer-Kelder, Gerda M. Van Thienen, Frans P.W. Tegelaers and Jo Hilgers (1981): Monoclonal antibodies anti Human acid α -glucosidase, Biochimica et Biophysica Acta, 678 (1981) 7-11.

NCBI AND UNIPROT INFORMATION

NCBI GI #	297623966
NCBI GeneID	9280727
NCBI Accession #	YP_003705400.1
NCBI GenBank Nucleotide #	NC_014221.1
NCBI Official Full Name	alpha-glucosidase
NCBI Official Symbol	Trad_1739
NCBI Protein Information	alpha-glucosidase

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/alpha-glucosidase-antibody-clone-43g7-immunoblot-immunohistochemistry-elisa/77501>