GLA/alpha-Galactosidase A Protein, Mouse (HEK293, His)

Cat. No.:	HY-P73077
Synonyms:	Alpha-Galactosidase A; GALA; GLA; Melibiase
Species:	Mouse
Source:	HEK293
Accession:	Q8BGZ6 (L34-R421)
Gene ID:	11605
Molecular Weight:	46-52 kDa

PROPERTIES

AA Sequence	L D N G L A R T P T M G W L H W E R F M C N L D C Q E E P D A C I S E Q L F M Q M A E L M V S D G W R D A G Y D Y L C I D D C W M A P E R D S K G R L Q A D P Q R F P S G I K H L A N Y V H S K G L K L G I Y A D V G N K T C A G F P G S F G S Y D I D A Q T F A D W G V D L L K F D G C H C D S V V S L E N G Y K Y M A L A L N R T G R S I V Y S C E W P L Y L R P F H K P N Y T D I Q Y Y C N H W R N F D D V Y D S W E S I K N I L S W T V V Y Q K E I V E V A G P G S W N D P D M L V I G N F G L S W D Q Q V T Q M A L W A I M A A P L L M S N D L R Q I S S Q A K A L L Q N K D V I A I N Q D P L G K Q G Y C F R K E N H I E V W E R P L S N L A W A V A V R N L Q E I G G P C P Y T I Q I S S L G R G L A C N P G C I I T Q L L P E K V H L G F Y E W T L T L K T R V N P S G T V L F R L E R
Biological Activity	Measured by its ability to hydrolyze 4-methylumbelliferyl-alpha-D-galactopyranoside. The specific activity is 833.54 pmoL/min/μg, as measured under the described conditions.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Alpha-galactosidase A is responsible for the breakdown of alpha-galactoside in lysosomes and is homologous to human galactosidase (GLA). GLA is involved in the negative regulation of nitric oxide biosynthesis and nitric oxide synthase activity. GLA acts upstream or internally in the catabolic process of glycosylceramide. Mice deficient in alpha-galactosidase A exhibit age-dependent and distinct sensory system deficits. This is a lysosome storage disorder characterized by the accumulation of alpha-galactosylated substrates in tissues. Alpha-galactosidase A is an active target of clinical research: there are currently two treatment options for Fabry disease, recombinant enzyme replacement therapy and drug companion therapy. Tlr-dependent alpha-Gal-A negative regulation is the mechanistic link between pathogen recognition and autolipid antigen induction in NKT cells[1][2][3][4].

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