

**Recombinant Protein Technical Manual** 

Recombinant Human Alpha-Galactosidase A/GLA Protein (His Tag) RPES3204

## Product Data:

Product SKU: RPES3204

Species: Human

**Size:** 10µg

Expression host: Human Cells

**Uniprot:** P06280

## **Protein Information:**

Molecular Mass:	46.4 kDa
AP Molecular Mass:	51 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 $\mu m$ filtered solution of 20mM TrisHCl, 150mM NaCl, pH 8.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Alpha-Galactosidase A; Alpha-D-Galactosidase A; Alpha-D-Galactoside Galactohydrolase; Melibiase; Agalsidase; GLA;GLAL

## Sequence: Leu32-Leu429

## Background:

 $\alpha$ -Galactosidase A is a homodimeric glycoprotein that belongs to the glycosyl hydrolase 27 family. It is a lysosomal enzyme and used as a long-term enzyme replacement therapy in patients with a confirmed diagnosis of Fabry disease.  $\alpha$ -Galactosidase A can hydrolyze terminal  $\alpha$ -galactosyl moieties from glycolipids and glycoproteins and catalyze the hydrolysis of melibiose into galactose and glucose. Defects  $\alpha$ -Galactosidase A are the cause of Fabry disease (FD) which is a rare X-linked sphingolipidosis disease with glycolipid accumulates in many tissues. The disease consists of an inborn error of glycosphingolipid catabolism. FD patients show systemic accumulation of globotriaoslyceramide (Gb3) and related glycosphingolipids in the plasma and cellular lysosomes throughout the body. Patients may show ocular deposits, febrile episodes, and burning pain in the extremities. Death results from renal failure, cardiac or cerebral complications of hypertension or other vascular disease.