



# Recombinant Protein Technical Manual

## Recombinant Human GNS Protein (His Tag)

RPES5106

### Product Data:

**Product SKU:** RPES5106

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P15586

### Protein Information:

**Molecular Mass:** 59.4 kDa

**AP Molecular Mass:** 87 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 10% Glycerol, pH 8.0.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** N-Acetylglucosamine-6-Sulfatase; Glucosamine-6-Sulfatase; G6S; GNS

## Immunogen Information:

**Sequence:** Val37-Leu552

## Background:

N-Acetylglucosamine-6-Sulfatase is a member of the Sulfatase family. N-Acetylglucosamine-6-Sulfatase is required for the lysosomal degradation of the Glycosaminoglycans (GAG) Heparan Sulfate and Keratan Sulfate. N-Acetylglucosamine-6-Sulfatase hydrolyzes the 6-Sulfate groups of the N-Acetyl-D-Glucosamine 6-Sulfate units of Heparan Sulfate and Keratan Sulfate. N-Acetylglucosamine-6-Sulfatase binds 1 Calcium ion per subunit. N-Acetylglucosamine-6-Sulfatase deficiency are the cause of Mucopolysaccharidosis Type 3D (MPS3D), an inborn error leading to lysosomal accumulation of heparan sulfate. MPS3D has profound mental deterioration, hyperactivity, and relatively mild somatic manifestations.