Data Sheet (Cat.No.TMPY-04121)

TargetMol

NAGA Protein, Human, Recombinant (His)

General Information

Synonyms:	D22S674;N-acetylgalactosaminidase, α-;N-acetylgalactosaminidase, alpha-;GALB;NAGA
Protein Construction:	A DNA sequence encoding the human NAGA (NP_000253.1) (Met1-Gln411) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Leu 18
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P17050
Molecular Weight:	46.1 kDa (predicted); 46 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

NAGA (Alpha-N-Acetylgalactosaminidase) is a Protein Coding gene. NAGA encodes the lysosomal enzyme alpha-N-acetylgalactosaminidase, which cleaves alpha-N-acetylgalactosaminyl moieties from glycoconjugates. It belongs to the glycosyl hydrolase 27 family. The antinociceptive effect of NAGA may involve the participation of endogenous opioid peptides and endogenous catecholamines. Normal alpha-NAGA is synthesized as a 52 kDa precursor which matures to a 49 kDa species through phosphorylation and carbohydrate trimming. Mutations in

gene encoding alpha-NAGA cause a wide range of diseases, characterized by mild to severe clinical features. NAGA is widely expressed in the placenta, appendix, and other tissues. Diseases associated with NAGA include Kanzaki Disease and Schindler Disease, Type I.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481