# Data Sheet (Cat.No.TMPY-03972)

TargetMol

## Aspartylglucosaminidase/AGA Protein, Human, Recombinant (His)

### General Information

Synonyms: GA;AGU;ASRG;aspartylglucosaminidase

Protein Construction: A DNA sequence encoding the human AGA (CAA39029.1) (Met1-Ile346) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Ser 24

Species: Human

Expression Host: HEK293 Cells

Accession: CAA39029.1

Molecular Weight: 36.1 kDa (predicted); 47, 29, 23 and 20 kDa (reducing condition, due to glycosylation)

### QC Testing

Biological Activity: Measured by its ability to hydrolyze the AspAMC. The specific activity is >300 pmol/min/μg.

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

AGA (Aspartylglucosaminidase) is an amidohydrolase enzyme involved in the catabolism of N-linked oligosaccharides of glycoproteins. This gene encodes a member of the N-terminal nucleophile (Ntn) hydrolase family of proteins. The encoded preproprotein is proteolytically processed to generate alpha and beta chains that comprise the mature enzyme. Diseases associated with AGA include Aspartylglucosaminuria and Lysosomal Storage Disease. An important paralog of this gene is ASRGL1.

Reference

Donato, R. et al., 2003, Microsc. Res. Tech. 60 (6): 540-551.
Gebhardt, C. et al., 2006, Biochem Pharmacol. 72 (11):1622-31.
Nonaka, D. et al., 2008, J. Cutan. Pathol. 35 (11): 1014-1019.
Lim, SY. et al., 2008, J Immunol. 181 (8): 5627-36.



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