

## GPR56 Protein, Human, Recombinant (His)

### General Information

Synonyms:	BFPP;UNQ540/PRO1083;DKFZp781L1398;TM7LN4;adhesion G protein-coupled receptor G1; TM7XN1
Protein Construction:	A DNA sequence encoding the human GPR56 isoform b (NP_958933.1) extracellular domain (Met 1-Val 342) was fused with a polyhistidine tag at the C-terminus. Predicted N terminal: Arg 26
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9Y653-2
Molecular Weight:	37.4 kDa (predicted); 50-60 kDa (reducing condition, due to glycosylation)

### 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:	> 80 % 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

ADGRG1 (Adhesion G Protein-Coupled Receptor G1, also known as GPR56) is a Protein Coding gene. GPR56 is a member of an adhesion G protein-coupled receptor family with a very long N-terminal stalk and seven transmembrane domains. The encoded protein binds specifically to transglutaminase 2, a component of tissue

and tumor stroma implicated as an inhibitor of tumor progression. GPR56 may be a target for the treatment of type 2 diabetes. GPR56 inhibits melanoma metastatic growth by impeding the expansion of micrometastases to macrometastases. GPR56 loss of function promotes mesenchymal differentiation and radioresistance of glioma initiating cells both in vitro and in vivo. Diseases associated with ADGRG1 include Polymicrogyria, Bilateral Frontoparietal, and Polymicrogyria, Bilateral Perisylvian, Autosomal Recessive.

### Reference

- Liu M., et al., 1999, Genomics 55: 296-305.  
Huang,Y. et al., 2008, Mol Cell Biochem. 308 (1-2):133-9.  
Li,S. et al., 2008, J Neurosci 28 (22):5817-26.  
Jin,Z. et al., 2009, Prog Mol Biol Transl Sci. 89 :1-13.  
Xu,L. et al., 2010, Clin Exp Metastasis. 27 (4):241-9.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

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