Data Sheet (Cat.No.TMPY-03412)

TargetMol

GGCT Protein, Human, Recombinant (His)

General Information

Synonyms:	gamma-glutamylcyclotransferase;C7orf24;GGC;γ-glutamylcyclotransferase;GCTG;CRF21
Protein Construction:	A DNA sequence encoding the mature form of human GGCT (O75223-1) (Met1-Leu188) was expressed with a polyhistide tag at the N-terminus. Predicted N terminal: His
Species:	Human
Expression Host:	E. coli
Accession:	O75223-1
Molecular Weight:	22.8 kDa (predicted); 23-26 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:	Please contact us for more information.
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

GGCT belongs to the gamma-glutamylcyclotransferase family. It catalyzes the formation of 5-oxoproline from gamma-glutamyl dipeptides, the penultimate step in glutathione catabolism. GGCT may play a significant role in glutathione homeostasis. GGCT also induces release of cytochrome c from mitochondria with resultant induction of apoptosis. Pseudogenes of GGCT gene are located on the long arm of chromosome 5 and the short arm of chromosomes 2 and 2. Alternatively spliced transcript variants encoding multiple isoforms have been observed

for this gene.

Reference

Wagner SA. et al., 2011, Mol Cell Proteomics. 10 (10): M111.013284.
Kim W. et al., 2011, Mol Cell. 44 (2): 325-40.
Amano T. et al., 2012, J Histochem Cytochem. 60 (1): 76-86.

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