

Human UGCG protein, His tag

Cat. No. GTX00280-pro

Applications	Functional Assay
Species	Human, Mouse, Rat

Package
10 µg

Applications

Application Note

UDP Glucose Ceramide Glucosyltransferase (UGCG) is an enzyme which catalyzes the first glycosylation step in glycosphingolipid biosynthesis. It belongs to the glycosyltransferase 2 family. UGCG is widely expressed and transcription is upregulated during keratinocyte differentiation. Besides, Large Multifunctional Peptidase 2 (LMP2) has been identified as an interactor of UGCG, thus a binding ELISA assay was conducted to detect the interaction of recombinant human UGCG and recombinant human LMP2. Briefly, UGCG were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to LMP2-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-UGCG pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of UGCG and LMP2 was in a dose dependent manner.

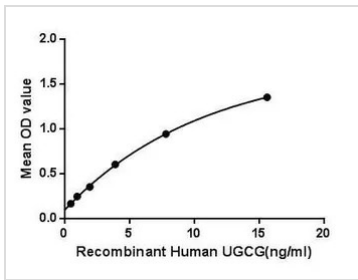
Observed MW (kDa) 16 kDa.

Properties

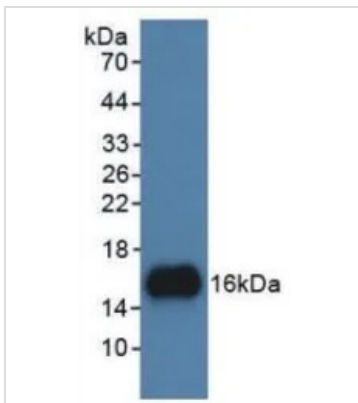
Form	Lyophilized powder
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.
Preservative	ProClin 300
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
Region/Sequence	N-terminal His-Tag; Lys39~Leu171 (NP_003349.1)
Expression System	E. coli
Purity	> 95%
Endotoxin	< 1 EU/µg
Conjugation	Unconjugated
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



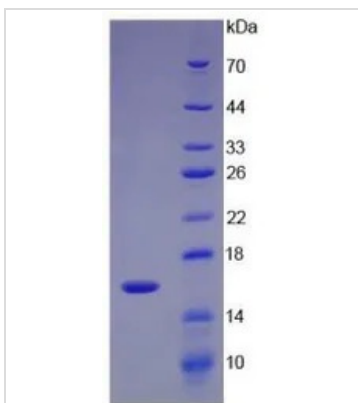
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DATA IMAGES

GTX00280-pro Functional Assay Image

Functional ELISA analysis of GTX00280-pro Human UGCG protein which can bind immobilized LMP2 protein.


GTX00280-pro Image

WB analysis of GTX00280-pro Human UGCG protein.


GTX00280-pro Image

SDS-PAGE analysis of GTX00280-pro Human UGCG protein.



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