

Product datasheet for **TP506157**

Ugcg (NM_011673) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse UDP-glucose ceramide glucosyltransferase (Ugcg), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR206157 representing NM_011673 Red =Cloning site Green =Tags(s)

MALLDLAQEGMALFGFVLFVWLWLMHFMSIYTRLHLNKKATDKQPYSKLPVGSLLKPLKGVDPNLINNL
ETFFELDYPKYEVLLCVQDHDDPAIDVCKKLLGKYPNVDARLFIGGKKGVINPKINLMPAYEVAKYDLI
WICDSGIRVIPDTLDMVNQMTEKVLVHGLPYVADRQGFATLEQVYFGTSHPRSYISANVTGFKCVTG
MSCLMRKDVLDQAGGLIAFAQYIAEDYFMAKAIADRGWRFSMSTQVAMQNSGSYSISQFQSRMIRWTKLR
INMLPATIICEPISECFVASLIIGWAAHHVFRWDIMVFFMCHCLAWFIFYQLRQVGGTLCFSKLDYA
VAWFIRESMTIYIFLSALWDPTISWRTGRYRLRCGGTAAEILDV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	45.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_035803
Locus ID:	22234
UniProt ID:	O88693



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RefSeq Size: 3719

Cytogenetics: 4 B3

RefSeq ORF: 1182

Synonyms: AU043821; C80537; Epcs21; GlcT-1; Ugcgl

Summary: Catalyzes at the cytosolic surface of the Golgi, the initial step of the glucosylceramide-based glycosphingolipid/GSL synthetic pathway, the transfer of glucose from UDP-glucose to ceramide to produce glucosylceramide/GlcCer (PubMed:10430909, PubMed:16109770, PubMed:28373486). Glucosylceramide is the core component of glycosphingolipids/GSLs, amphipathic molecules consisting of a ceramide lipid moiety embedded in the outer leaflet of the membrane, linked to one of hundreds of different externally oriented oligosaccharide structures (PubMed:10430909). Glycosphingolipids are essential components of membrane microdomains that mediate membrane trafficking and signal transduction (PubMed:10430909). They are implicated in many fundamental cellular processes, including growth, differentiation, migration, morphogenesis, cell-to-cell and cell-to-matrix interactions (PubMed:10430909). They are required for instance in the proper development and functioning of the nervous system (PubMed:16109770). As an example of their role in signal transduction, they regulate the leptin receptor/LEPR in the leptin-mediated signaling pathway (PubMed:23554574). They also play an important role in the establishment of the skin barrier regulating keratinocyte differentiation and the proper assembly of the cornified envelope (PubMed:17145749, PubMed:23748427). The biosynthesis of GSLs is also required for the proper intestinal endocytic uptake of nutritional lipids (PubMed:22851168).[UniProtKB/Swiss-Prot Function]