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Anti-UGCG Antibody
Catalog # AP53709

Specification

Anti-UGCG Antibody - Product Information

Application	**WB**
Primary Accession	Q16739
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**44854**

Anti-UGCG Antibody - Additional Information

Gene ID 7357

Other Names
Ceramide glucosyltransferase; GLCT-1; Glucosylceramide synthase; GCS; UDP-glucose ceramide glucosyltransferase; UDP-glucose:N-acylsphingosine D-glucosyltransferase

Target/Specificity
Recognizes endogenous levels of UGCG protein.

Dilution
WB~~1/500 - 1/1000

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-UGCG Antibody - Protein Information

Name UGCG (HGNC:12524)

Function
Participates in the initial step of the glucosylceramide- based glycosphingolipid/GSL synthetic pathway at the cytosolic surface of the Golgi (PubMed:1532799, PubMed:8643456). Catalyzes the transfer of glucose from UDP-glucose to ceramide to produce glucosylceramide/GlcCer (such as beta-D-glucosyl-(1<->1')-N-acylsphing- 4-enine) (PubMed:1532799, PubMed:8643456). GlcCer 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:8643456). Glycosphingolipids are essential components of membrane microdomains that mediate membrane trafficking and signal transduction, implicated in many fundamental cellular processes, including growth, differentiation, migration, morphogenesis, cell-to-cell and cell-to-matrix interactions (By similarity). They are required for instance in the proper development and functioning of the nervous system (By similarity). As an example of their role in signal transduction, they regulate the leptin receptor/LEPR in the leptin-mediated signaling pathway (By similarity). They also play an important role in the establishment of the skin barrier regulating keratinocyte differentiation and the proper assembly of the cornified envelope (By similarity). The biosynthesis of GSLs is also required for the proper intestinal endocytic uptake of nutritional lipids (By similarity). Catalyzes the synthesis of xylosylceramide/XylCer (such as beta-D-xylosyl-(1<->1')-N-acylsphing-4- enine) using UDP-Xyl as xylose donor (PubMed:33361282).

Cellular Location
Golgi apparatus membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9R0E0}

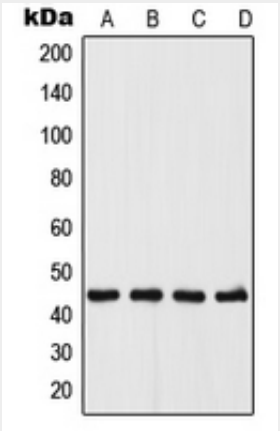
Tissue Location
Found in all tissues examined.

Anti-UGCG Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-UGCG Antibody - Images



Western blot analysis of UGCG expression in A375 (A), MCF7 (B), Raw264.7 (C), PC12 (D) whole cell lysates.

Anti-UGCG Antibody - Background

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Rabbit polyclonal antibody to UGCG