

Ceramide Glycosyltransferase. Rabbit Polyclonal Antibody

Glucosylceramide synthase, GCS, UDP glucose N-acylsphingosine D glucosyltransferase, GLCT-1, UDP glucose ceramide glucosyltransferase

BACKGROUND

May serve as a flippase as well as a glucosyltransferase that transfers glucose to ceramide. It Catalyzes; UDP-glucose + N-acylsphingosine = UDP + D-glucosyl-N-acylsphingosine. Ceramide Glycosyltransferase is the first step in the Glycosphingolipid synthesis; first glycosylation step. Glucosylceramide synthase (GlcT) and lactosylceramide synthase (GalT) are key enzymes for the synthesis of major glycosphingolipids of vertebrates.

ORDERING INFORMATION

CATALOG NUMBER
X1700P

SIZE
100 µg
FORM
Unconjugated

HOST/CLONE
Rabbit

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
See vial for concentration

ISOTYPE
N/A

APPLICATIONS
Western Blot, ELISA

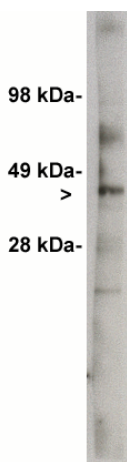
SPECIES REACTIVITY
Human

ACCESSION NUMBER
Human Q16739

IMMUNOGEN

Synthetic peptide derived from human ceramide glycosyltransferase protein.

Western blot analysis using Ceramide Glycosyltransferase antibody (X1700P) on 7 µg of rat kidney lysate. Antibody used at 1 µg/ml. Visualized using Pierce West Femto substrate system. Secondary used at 1:75k dilution. Exposure for 60 seconds.



POSITIVE CONTROL/TISSUE EXPRESSION

Found in all tissues examined.

COMMENTS

Antibody can be used for Western blotting (5-10 μ g/ml) and ELISA. Other applications not yet tested. Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Ammonium Sulfate Precipitation

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Expression cloning of a cDNA for human ceramide glucosyltransferase that catalyzes the first glycosylation step of glycosphingolipid synthesis.; Ichikawa S., Sakiyama H., Suzuki G., Hidari K.I.-P., Hirabayashi Y.; Proc. Natl. Acad. Sci. U.S.A. 93:4638-4643(1996).

2. van Vlerken, L.E., et al. 'Modulation of Intracellular Ceramide Using Polymeric Nanoparticles to Overcome Multidrug Resistance in Cancer.' Cancer Res., 67, 4843-4850, (2007).

PRODUCT SPECIFIC REFERENCES

1. D'Angelo, G., et al, 'Glycosphingolipid synthesis requires FAPP2 transfer of glucosylceramide.' Nature 2007, 449, , 62-67