

GLTP (m): 293T Lysate: sc-120509

BACKGROUND

GLTP (glycolipid transfer protein) is a 209 amino acid protein that belongs to the GLTP family. GLTP accelerates glycolipid intermembrane transfer via a unique lipid transfer/binding fold (GLTP fold) that defines the GLTP superfamily. GLTP catalyzes the transfer of various glycosphingolipids between membranes, but does not catalyze the transfer of phospholipids. GLTP may also be involved in the intracellular translocation of glucosylceramides. Highly conserved among mammals, GLTP is detected in fibroblasts as well as various cancer cell lines. Existing as a monomer, GLTP is localized to the cytoplasm and is encoded by a gene that maps to human chromosome 12q24.11 and mouse chromosome 5 F.

REFERENCES

1. Mattjus, P., et al. 2000. Charged membrane surfaces impede the protein-mediated transfer of glycosphingolipids between phospholipid bilayers. *Biochemistry* 39: 1067-1075.
2. Li, X.M., et al. 2004. Human glycolipid transfer protein: probing conformation using fluorescence spectroscopy. *Biochemistry* 43: 10285-10294.
3. Rao, C.S., et al. 2004. Glycolipid transfer protein mediated transfer of glycosphingolipids between membranes: a model for action based on kinetic and thermodynamic analyses. *Biochemistry* 43: 13805-13815.
4. Malinina, L., et al. 2004. Structural basis for glycosphingolipid transfer specificity. *Nature* 430: 1048-1053.
5. Malakhova, M.L., et al. 2005. Point mutational analysis of the liganding site in human glycolipid transfer protein. Functionality of the complex. *J. Biol. Chem.* 280: 26312-26320.
6. Airenne, T.T., et al. 2006. Structural evidence for adaptive ligand binding of glycolipid transfer protein. *J. Mol. Biol.* 355: 224-236.
7. Tuuf, J. and Mattjus, P. 2007. Human glycolipid transfer protein—intracellular localization and effects on the sphingolipid synthesis. *Biochim. Biophys. Acta* 1771: 1353-1363.

CHROMOSOMAL LOCATION

Genetic locus: GLTP (mouse) mapping to 5 F.

PRODUCT

GLTP (m): 293T Lysate represents a lysate of mouse GLTP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

GLTP (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GLTP antibodies. Recommended use: 10-20 µl per lane.

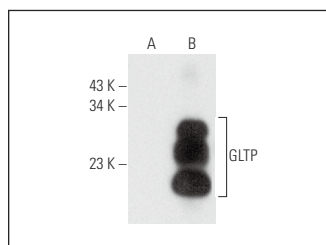
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GLTP (D-9): sc-514388 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse GLTP expression in GLTP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

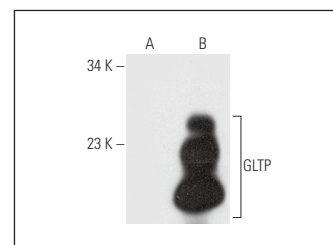
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



GLTP (D-9): sc-514388. Western blot analysis of GLTP expression in non-transfected: sc-117752 (A) and mouse GLTP transfected: sc-120509 (B) 293T whole cell lysates.



GLTP (C-3): sc-514289. Western blot analysis of GLTP expression in non-transfected: sc-117752 (A) and mouse GLTP transfected: sc-120509 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.