

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Protein O-Glucosyltransferase 1/POGLUT in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 737512
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Protein O-Glucosyltransferase 1/POGLUT Arg24-Leu388 Accession # Q8NBL1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

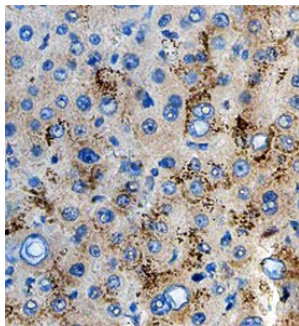
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Immunohistochemistry



Protein O-Glucosyltransferase 1/POGLUT1 in Human Liver. Protein O-Glucosyltransferase 1/POGLUT1 was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human Protein O-Glucosyltransferase 1/POGLUT1 Monoclonal Antibody (Catalog # MAB64371) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of hepatocytes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Protein O-Glucosyltransferase1 (POGLUT1) is a homologue of Rumi from *Drosophila*, an endoplasmic reticulum (ER)-retaining glucosyltransferase, that adds glucose to serine residues within the consensus sequence of C1-X-S-X-P-C2 in Notch EGF repeats, thereby regulating cell-fate decisions (1). It is also known as CAP10-like protein (2) and KTELC1 due to the highly conserved CAP10 domain and the presence of an ER-retaining motif, KTEL, at the C-terminus. The human gene is reported to be involved in the pathogenesis of both acute myelogenous and T-acute lymphoblastic leukemias (3). POGLUT1 has hydrolase activity on UDP-Glc in a phosphatase-coupled glucosyltransferase assay (4).

References:

1. Acar, M. *et al.* (2008) *Cell* **132**:247.
2. Teng, Y. *et al.* (2006) *Gene* **371**:7
3. Wang, Y. *et al.* (2010) *Genet Test Mol Biomarkers* **14**:127.
4. Wu, Z.L. *et al.* (2011) *Glycobiology* **21**:727.