iFluor™ 488 Conjugated Anti-OGT Antibody [JB44-39]

HA720156F

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	IF-Cell
Molecular Wt:	Predicted band size: 117 kDa
Clone number:	JB44-39

Description: O-linked N-acetylglucosamine (O-GlcNAc) transferase (also designated OGT) catalyzes the addition of a single N-acetylglucosamine in O-glycosidic linkage to serine or threonine residues. Since both phosphorylation and glycosylation compete for similar serine or threonine residues, the two processes may compete for sites, or they may alter the substrate specificity of nearby sites by steric or electrostatic effects. O-GlcNAc transferase has been purified from rat liver. It exists as a heterotrimeric complex with two subunits of the same molecular mass and one shorter subunit. Both polypeptides are related; the short subunit band is either a proteolytic product of the polypeptide or the product of an alternative translation start site. O-GlcNAc transferase is expressed as multiple transcripts that are present in different amounts in various human tissues, with the highest levels of expression in pancreas. Immunofluorescence of human cells expressing rat O-GlcNAc transferase indicated that it is present in both the nucleus and cytosol. HeLa cells expressing O-GlcNAc transferase do not survive well during prolonged incubations, suggesting that this protein may be toxic to the cells.

Conjugate:	iFluor™ 488, Ex: 491nm; Em: 516nm.
Immunogen:	Synthetic peptide within Human OGT aa 997-1,046 / 1,046.
Positive control:	Hela.
Subcellular location:	Nucleus. Cytoplasm. Membrane.
Database links:	SwissProt: O15294 Human
Recommended Dilutions:	
IF-Cell	1:75
Storage Buffer:	Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS
Storage Instruction:	Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Images

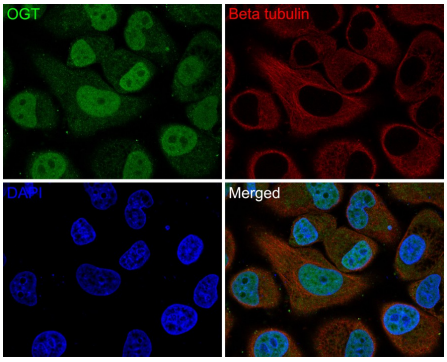

Fig1: Immunocytochemistry analysis of Hela cells labeling OGT with Rabbit anti-OGT antibody (HA720156F) at 1/75 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 2% normal goat serum for 1 hour at 37 ℃. Cells were then incubated with Rabbit anti-OGT antibody (HA720156F) at 1/75 dilution in 2% normal goat serum overnight at 4 ℃. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/200 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) were used as the secondary antibody at 1/800 dilution.

Background References

1. Yang X et al. Recruitment of O-GlcNAc transferase to promoters by corepressor mSin3A: coupling protein O-GlcNAcylation to transcriptional repression. Cell 110:69-80 (2002).
2. Yang X et al. Phosphoinositide signalling links O-GlcNAc transferase to insulin resistance. Nature 451:964-969 (2008).