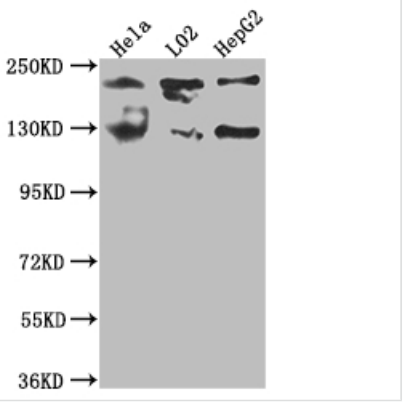
MGEA5 Antibody

Product Code	CSB-RA833565A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O60502
Immunogen	A synthesized peptide derived from human MGEA5
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	Isoform 1: Cleaves GlcNAc but not GalNAc from O-glycosylated proteins. Can use p-nitrophenyl-beta-GlcNAc and 4-methylumbelliferone-GlcNAc as substrates but not p-nitrophenyl-beta-GalNAc or p-nitrophenyl-alpha-GlcNAc (in vitro) (PubMed:11148210). Does not bind acetyl-CoA and does not have histone acetyltransferase activity (PubMed:24088714).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Immunology; Metabolism; Signal transduction
Gene Names	MGEA5
Accession NO.	8D12

Image



Western Blot
Positive WB detected in: Hela whole cell lysate, L02 whole cell lysate, HepG2 whole cell lysate
All lanes: MGEA5 antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 103, 96, 77, 97 kDa
Observed band size: 130 kDa

Description

The MGEA5 gene encodes protein O-GlcNAcase (OGA), which is responsible

for the hydrolysis of the O-linked β-N-acetyl glucosamine (O-GlcNAc) modification, an essential protein glycosylation event that modulates the function of numerous cellular proteins in response to nutrients and stress. OGA is a member of the family of hexosaminidases and is mainly localized in the cytosol. However, unlike lysosomal hexosaminidases, OGA activity is the highest at neutral pH (approximately 7). Nicholas B. Hastings et al. has demonstrated that inhibition of O-GlcNAcase leads to elevation of O-GlcNAc tau and reduction of tauopathy and cerebrospinal fluid tau in rTg4510 mice.

Compared with the polyclonal and monoclonal antibodies of MGEA5, this MGEA5 recombinant antibody has the features of increased reproducibility and control, animal-free technology, high degree of monovalency, high batch-to-batch consistency, easier isotype conversion, etc. And it has been validated in ELISA, WB.