10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HYOU1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant HYOU1.
Catalog # AT2464a

Product Information

Application	WB, IHC, E
Primary Accession	Q9Y4L1
Other Accession	NM_006389
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	6F7
Calculated MW	111335

Additional Information

Gene ID	10525
Other Names	Hypoxia up-regulated protein 1, 150 kDa oxygen-regulated protein, ORP-150, 170 kDa glucose-regulated protein, GRP-170, HYOU1, GRP170, ORP150
Target/Specificity	HYOU1 (NP_006380, 901 a.a. ~ 999 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	HYOU1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

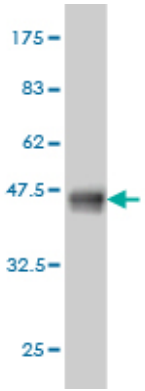
The protein encoded by this gene belongs to the heat shock protein 70 family. This gene uses alternative transcription start sites. A cis-acting segment found in the 5' UTR is involved in stress-dependent induction, resulting in the accumulation of this protein in the endoplasmic reticulum (ER) under hypoxic conditions. The protein encoded by this gene is thought to play an important role in protein folding and secretion in the ER. Since suppression of the protein is associated with accelerated apoptosis, it is also suggested to have an important cytoprotective role in hypoxia-induced cellular perturbation. This protein has been shown to be up-regulated in tumors, especially in breast tumors, and thus it is associated with tumor invasiveness. This gene also has an alternative translation initiation site, resulting in a protein that lacks the N-terminal signal peptide. This signal peptide-lacking protein, which is only 3 amino acids shorter than the mature protein in the ER, is thought to have a housekeeping function in the cytosol. In rat, this protein localizes to both the ER

by a carboxy-terminal peptide sequence and to mitochondria by an amino-terminal targeting signal.

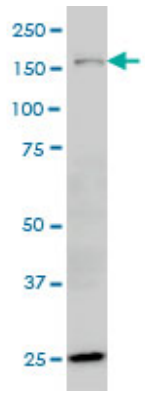
References

1.Limited expression of reticulocalbin-1 in lymphatic endothelial cells in lung tumor but not in normal lung.Yoshida Y, Yamashita T, Nagano K, Imai S, Nabeshi H, Yoshikawa T, Yoshioka Y, Abe Y, Kamada H, Tsutsumi Y, Tsunoda SI.Biochem Biophys Res Commun. 2011 Jan 25. [Epub ahead of print]2.Proteinuria and Hyperglycemia Induce Endoplasmic Reticulum Stress.Lindenmeyer MT, Rastaldi MP, Ikehata M, Neusser MA, Kretzler M, Cohen CD, Schlondorff D.J Am Soc Nephrol. 2008 Nov;19(11):2225-36. Epub 2008 Sep 5.3.Mechanism of cancer cell adaptation to metabolic stress: proteomics identification of a novel thyroid hormone mediated gastric carcinogenic signaling pathway.Liu R, Li Z, Bai S, Zhang H, Tang M, Lei Y, Chen L, Liang S, Zhao YL, Wei Y, Huang C.Mol Cell Proteomics. 2009 Jan;8(1):70-85. Epub 2008 Aug 22.

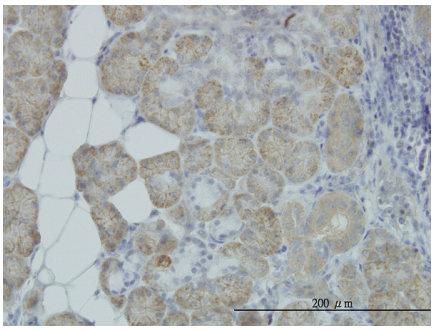
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .

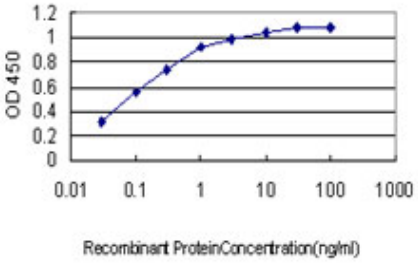


HYOU1 monoclonal antibody (M01), clone 6F7 Western Blot analysis of HYOU1 expression in MCF-7 ((Cat # AT2464a)



Immunoperoxidase of monoclonal antibody to HYOU1 on formalin-fixed paraffin-embedded human salivary gland. [antibody concentration 1 ug/ml]

Detection limit for recombinant GST tagged HYOU1 is approximately 0.03ng/ml as a capture antibody.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.