

Datasheet

HYOU1 monoclonal antibody (M01), clone 6F7

Catalog Number: H00010525-M01

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against a partial recombinant HYOU1.

Clone Name: 6F7

Immunogen: HYOU1 (NP_006380, 901 a.a. ~ 999 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Sequence:

EVQYLLNKAFTKPRPRPKDKNGTRAEPPLNASASDQ
GEKVIPPAGQTEDAEPISEPEKVVETGSEPGDTEPLELG
GPGAEPQKEQSTGQKRPLKNDEL

Host: Mouse

Reactivity: Human

Applications: ELISA, IHC-P, S-ELISA, WB-Ce, WB-Re (See our web site product page for detailed applications information)

Protocols: See our web site at <http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Isotype: IgG1 Kappa

Storage Buffer: In 1x PBS, pH 7.4

Storage Instruction: Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 10525

Gene Symbol: HYOU1

Gene Alias: DKFZp686N08236, FLJ94899, FLJ97572, Grp170, HSP12A, ORP150

Gene Summary: 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. [provided by RefSeq]

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.