

**HYOU1 Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a partial recombinant HYOU1.****Catalog # AT2464a****Specification**

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**HYOU1 Antibody (monoclonal) (M01) - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | WB, IHC, E                |
| Primary Accession | <a href="#">O9Y4L1</a>    |
| Other Accession   | <a href="#">NM_006389</a> |
| Reactivity        | Human                     |
| Host              | mouse                     |
| Clonality         | Monoclonal                |
| Isotype           | IgG1 Kappa                |
| Calculated MW     | 111335                    |

**HYOU1 Antibody (monoclonal) (M01) - 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

**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.

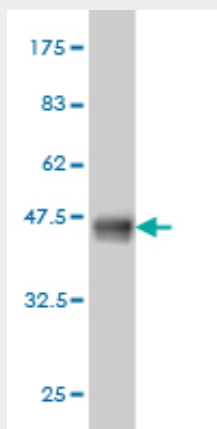
**HYOU1 Antibody (monoclonal) (M01) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

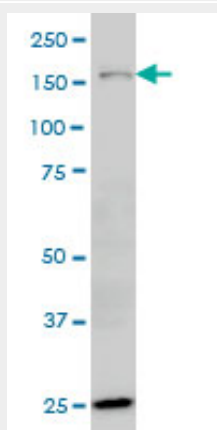
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

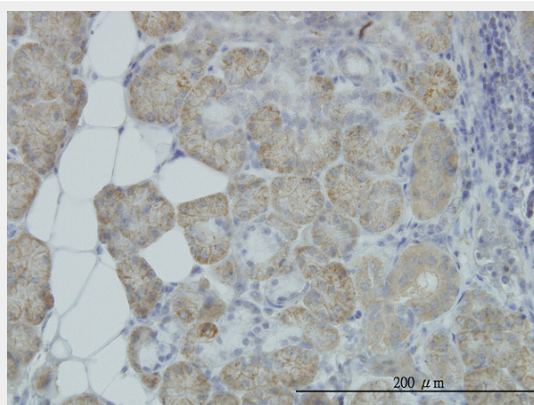
## **HYOU1 Antibody (monoclonal) (M01) - Images**



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

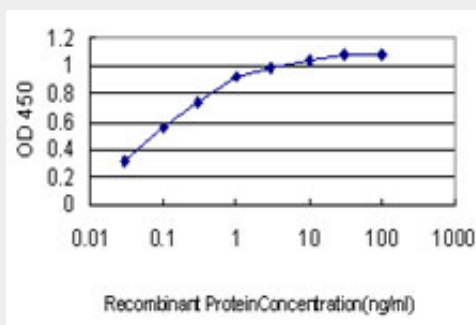


HYOU1 monoclonal antibody (M01), clone 6F7 Western Blot analysis of HYOU1 expression in MCF-7 ( (Cat # AT2464a )



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.

### **HYOU1 Antibody (monoclonal) (M01) - 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.

### **HYOU1 Antibody (monoclonal) (M01) - 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.