

**HYOU1 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7318c****Specification**

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**HYOU1 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [Q9Y4L1](#)**HYOU1 Antibody (Center) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP7318c](/products/AP7318c) was selected from the Center region of human HYOU1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**HYOU1 Antibody (Center) Blocking Peptide - Protein Information****Name** HYOU1**Synonyms** GRP170, HSPH4 {ECO:0000303|PubMed:186636}**Function**

Has a pivotal role in cytoprotective cellular mechanisms triggered by oxygen deprivation. May play a role as a molecular chaperone and participate in protein folding.

**Cellular Location**

Endoplasmic reticulum lumen.

**Tissue Location**

Highly expressed in tissues that contain well- developed endoplasmic reticulum and synthesize large amounts of secretory proteins. Highly expressed in liver and pancreas and lower expression

in brain and kidney. Also expressed in macrophages within aortic atherosclerotic plaques, and in breast cancers

### **HYOU1 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **HYOU1 Antibody (Center) Blocking Peptide - Images**

### **HYOU1 Antibody (Center) Blocking Peptide - Background**

HYOU1 belongs to the heat shock protein 70 family. The protein 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 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 (Center) Blocking Peptide - References**

Kitao,Y., Matsuyama,T. Antioxid. Redox Signal. 9 (5), 589-595 (2007)Bando,Y., Ogawa,S. Am. J. Physiol., Cell Physiol. 278 (6), C1172-C1182 (2000)