

**HYOU1 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7318c**

**Specification**

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**HYOU1 Antibody (Center) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | IF, WB, IHC-P,E        |
| Primary Accession | <a href="#">O9Y4L1</a> |
| Reactivity        | Human                  |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Calculated MW     | 111335                 |
| Antigen Region    | 274-303                |

**HYOU1 Antibody (Center) - 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**

This HYOU1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 274-303 amino acids from the Central region of human HYOU1.

**Dilution**

IF~~1:10~50  
WB~~1:1000  
IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

HYOU1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**HYOU1 Antibody (Center) - 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**

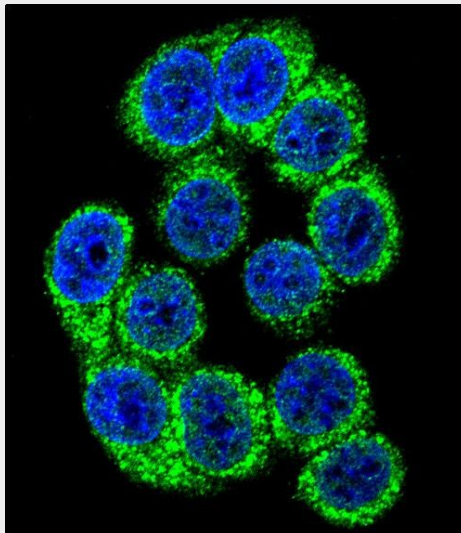
Highly expressed in tissues that contain well- developed endoplasmic reticulum and synthesize large amounts of secretory proteins. Highly expressed in liver and pancreas and lower expression in brain and kidney. Also expressed in macrophages within aortic atherosclerotic plaques, and in breast cancers

**HYOU1 Antibody (Center) - Protocols**

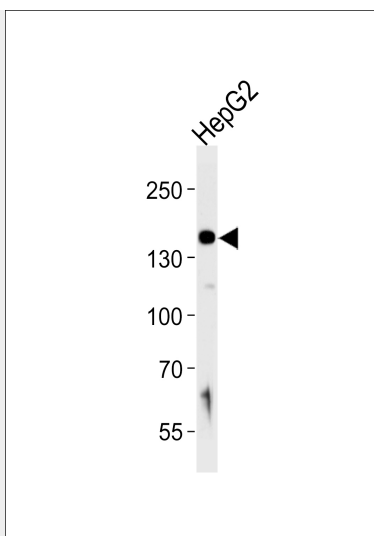
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

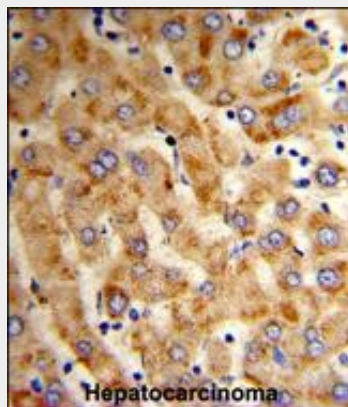
**HYOU1 Antibody (Center) - Images**



Confocal immunofluorescent analysis of HYOU1 Antibody (Center)(Cat#AP7318c) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Western blot analysis of lysate from HepG2 cell line, using HYOU1 Antibody (Center)(Cat. #AP7318c). AP7318c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with HYOU1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### **HYOU1 Antibody (Center) - 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) - 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)