## Anti-ORP150 Antibody [JG39-11]

## ET7108-84



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human, Mouse, Rat
Applications: WB, IHC-P, FC

Molecular Wt: 111 kDa
Clone number: JG39-11

**Description:** ORP150, also known as HYOU1 (hypoxia upregulated 1), is a 999 amino acid protein that

localizes to the lumen of the endoplasmic reticulum (ER) and is a member of the heat shock protein 70 (HSP 70) family. ORP150 is highly expressed in tissues that have well-developed ERs and a large number of secretory proteins (such as liver and pancreas). It is expressed at lower levels in kidney and brain, and plays an essential role in cytoprotective cellular responses to hypoxia (oxygen deprivation). Specifically, ORP150 participates in protein folding and secretion in the ER and functions to protect cells from hypoxia-induced apoptosis, thereby playing a crucial role in cell survival. ORP150 expression is upregulated in a variety of tumors, such as breast cancer, suggesting an important role in tumorigenesis. The gene encoding ORP150 has two translation initiation sites, resulting in a truncated transcript that lacks an ER signal peptide, but is thought to function as a

housekeeping protein in the cytoplasm.

Immunogen: Recombinant protein within Human ORP150 aa 1-190 / 999.

Positive control: HepG2, mouse prostate tissue lysate, rat testis tissue, human liver cancer tissue, human

small intestine tissue, mouse testis tissue.

**Subcellular location:** Endoplasmic reticulum.

Database links: SwissProt: Q9Y4L1 Human | Q9JKR6 Mouse

Recommended Dilutions:

 WB
 1:5,000-1:20,000

 IHC-P
 1:50-1:200

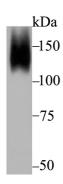
 FC
 1:50-1:100

Storage Buffer: 1\*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

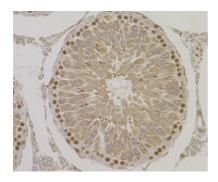
Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

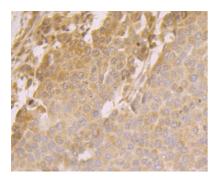




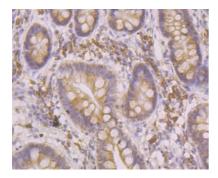
**Fig1:** Western blot analysis of ORP150 on mouse prostate tissue lysate using anti-ORP150 antibody at 1/5,000 dilution.



**Fig2:** Immunohistochemical analysis of paraffin-embedded rat testis tissue using anti-ORP150 antibody. Counter stained with hematoxylin.

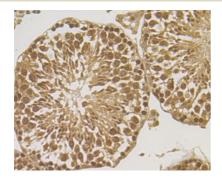


**Fig3:** Immunohistochemical analysis of paraffin-embedded human liver cancer tissue using anti-ORP150 antibody. Counter stained with hematoxylin.



**Fig4:** Immunohistochemical analysis of paraffin-embedded human small intestine tissue using anti-ORP150 antibody. Counter stained with hematoxylin.





**Fig5:** Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-ORP150 antibody. Counter stained with hematoxylin.

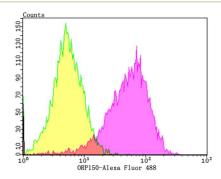


Fig6: Flow cytometric analysis of HepG2 cells with ORP150 antibody at 1/100 dilution (purple) compared with an unlabelled control (cells without incubation with primary antibody; yellow). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## **Background References**

- 1. Ozawa K et al. 150-kDa oxygen-regulated protein (ORP150) suppresses hypoxia-induced apoptotic cell death. J Biol Chem 274:6397-6404 (1999).
- 2. Zhang H et al. Identification and quantification of N-linked glycoproteins using hydrazide chemistry, stable isotope labeling and mass spectrometry. Nat Biotechnol 21:660-666 (2003).

