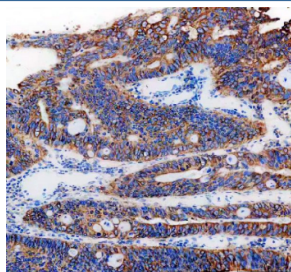


PGRMC1 Antibody / HPR6.6 / IZA (R31787)

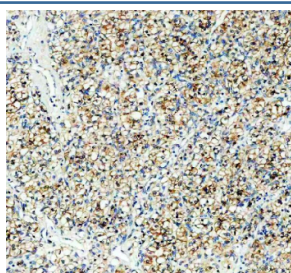
| Catalog No. | Formulation | Size |
|-------------|---|--------|
| R31787 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

Bulk quote request

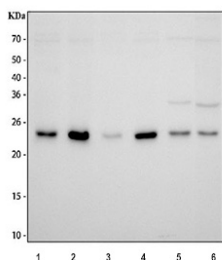
| | |
|---------------------------|---|
| Availability | 1-3 business days |
| Species Reactivity | Human, Mouse, Rat |
| Format | Antigen affinity purified |
| Clonality | Polyclonal (rabbit origin) |
| Isotype | Rabbit IgG |
| Purity | Antigen affinity |
| Buffer | Lyophilized from 1X PBS with 2% Trehalose |
| UniProt | O00264 |
| Localization | Cytoplasmic, cell membrane, nuclei |
| Applications | Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml |
| Limitations | This PGRMC1 antibody is available for research use only. |



IHC staining of FFPE human colon cancer tissue with PGRMC1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human renal cancer tissue with PGRMC1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HeLa, 2) human 293T, 3) human Jurkat, 4) human U-251, 5) rat liver and 6) mouse liver tissue lysate with PGRMC1 antibody. Expected molecular weight ~22 kDa.

Description

PGRMC1 (Membrane-associated progesterone receptor component 1) is a multifunctional protein that belongs to the membrane-associated progesterone receptor family. It is primarily localized to intracellular membranes, including the endoplasmic reticulum, where it interacts with cytochrome P450 enzymes and regulates steroid metabolism, drug detoxification, and lipid homeostasis. A PGRMC1 antibody is frequently used to study steroid signaling, metabolic regulation, and protein-protein interactions within cellular membranes.

PGRMC1 has been shown to bind heme, making it a unique signaling mediator involved in electron transfer and regulation of cytochrome P450 activity. It contributes to cholesterol synthesis, progesterone signaling, and the cellular response to oxidative stress. Using a PGRMC1 antibody allows researchers to examine its roles in steroid hormone regulation, drug metabolism, and stress adaptation pathways.

In addition to its metabolic roles, PGRMC1 has been implicated in cancer biology. Overexpression of PGRMC1 has been observed in multiple tumor types, including breast, ovarian, and lung cancers, where it is thought to support cell survival, angiogenesis, and resistance to chemotherapy. Dysregulation of PGRMC1 has also been associated with neurodegenerative conditions, making it a focus of interest in both oncology and neuroscience research. Employing a PGRMC1 antibody provides an effective tool to monitor expression levels and investigate its molecular interactions in health and disease.

NSJ Bioreagents provides a high-quality PGRMC1 antibody validated for use in western blotting, immunohistochemistry, and immunofluorescence. By selecting a PGRMC1 antibody from NSJ Bioreagents, researchers gain access to a reliable tool for exploring membrane-associated steroid signaling, metabolic processes, and disease pathways.

Application Notes

Optimal dilution of the PGRMC1 antibody should be determined by the researcher.

Immunogen

Amino acids RLKRRDFTPAELRRFDGVQDPRLMAINGKVFDVTK of the human protein were used as the immunogen for the PGRMC1 antibody.

Storage

After reconstitution, the PGRMC1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

