

## **HDGFRP2 Antibody**

Catalog # ASC11351

## **Specification**

## **HDGFRP2 Antibody - Product Information**

**Application Primary Accession** Other Accession Reactivity Host Clonality Isotype **Application Notes** 

WB, IHC, IF 07Z4V5 EAW69215, 48255931 Human, Mouse, Rat **Rabbit** 

**Polyclonal** 

IaG

**HDGFRP2** antibody can be used for detection of HDGFRP2 by Western blot at 0.5 - 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

## **HDGFRP2** Antibody - Additional Information

Gene ID 84717

# Target/Specificity

HDGFRP2; At least two isoforms of HDGFRP2 are known to exist; this antibody will recognize both isoforms. This antibody is predicted to not cross-react with other HDGFRP family members

#### **Reconstitution & Storage**

HDGFRP2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

HDGFRP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **HDGFRP2 Antibody - Protein Information**

Name HDGFL2 (HGNC:14680)

#### **Function**

Acts as an epigenetic regulator of myogenesis in cooperation with DPF3a (isoform 2 of DPF3/BAF45C) (PubMed:<a href="http://www.uniprot.org/citations/32459350" target=" blank">32459350</a>). Associates with the BAF complex via its interaction with DPF3a and HDGFL2-DPF3a activate myogenic genes by increasing chromatin accessibility through recruitment of SMARCA4/BRG1/BAF190A (ATPase subunit of the BAF complex) to myogenic gene promoters (PubMed:<a href="http://www.uniprot.org/citations/32459350" target=" blank">32459350</a>). Promotes the repair of DNA double-strand breaks (DSBs) through the homologous recombination pathway by facilitating the recruitment of the DNA



endonuclease RBBP8 to the DSBs (PubMed:<a href="http://www.uniprot.org/citations/26721387" target="\_blank">26721387</a>). Preferentially binds to chromatin regions marked by H3K9me3, H3K27me3 and H3K36me2 (PubMed:<a href="http://www.uniprot.org/citations/26721387" target="\_blank">26721387</a>, PubMed:<a href="http://www.uniprot.org/citations/32459350" target="\_blank">32459350</a>). Involved in cellular growth control, through the regulation of cyclin D1 expression (PubMed:<a href="http://www.uniprot.org/citations/25689719" target="blank">25689719</a>).

#### **Cellular Location**

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q925G1}

#### **Tissue Location**

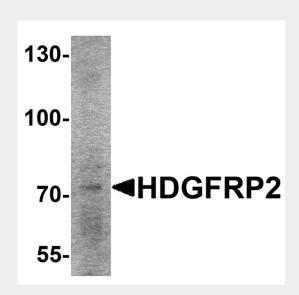
Widely expressed. High expression is found in heart, skeletal muscle, ovary and testis. Overexpression is frequently observed in hepatocellular carcinoma samples

## **HDGFRP2 Antibody - Protocols**

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

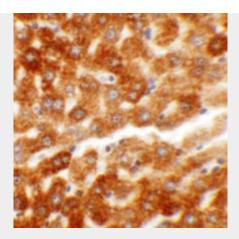
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **HDGFRP2 Antibody - Images**

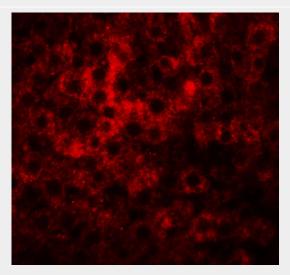


Western blot analysis of HDGFRP2 in rat lung tissue lysate with HDGFRP2 antibody at 2 µg/mL.





Immunohistochemistry of HDGFRP2 in rat liver tissue with HDGFRP2 antibody at 5 µg/mL.



Immunofluorescence of HDGFRP2 in rat liver tissue with HDGFRP2 antibody at 20 µg/mL.

## **HDGFRP2 Antibody - Background**

HDGFRP2 Antibody: Hepatoma-derived growth factor-related protein 2 (HDGFRP2) is a widely expressed member of protein family that contains the HDGF related proteins 1-4 and lens epithelial derived growth factor (LEDGF). These family members show extensive homology at the amino terminus (termed the hath region). Little is known of the role of HDGFRP2, but like the related LEDGF, HDGFRP2 can bind HIV-1 integrase and stimulate HIV-1 integrase activity in vitro.

## **HDGFRP2 Antibody - References**

El-Tahir HM, Dietz F, Dringen R, et al. Expression of Hepatoma-derived growth factor family members in the adult central nervous system. BMC Neurosci. 2006; 7:6.

Izumoto Y, Kuroda T, Harada H, et al. Hepatoma-derived growth factor belongs to a gene family in mice showing significant homology in the amino terminus. Biochem. Biophys. Res. Commun. 1997; 238:26-32

Cherepanov P, Devroe E, Silver PA, et al. Identification of an evolutionarily conserved domain in human lens epithelium-derived growth factor/transcriptional co-activator p75 (LEDGF/p75) that binds HIV-1 integrase. J. Biol. Chem. 2004; 279:48883-92.