

HPL

Rabbit Monoclonal antibody(Mab) Catalog # AD80471

# **Specification**

# **HPL - Product info**

Application Primary Accession Reactivity Host Clonality Calculated MW IHC-P P09382 Human Rabbit Monoclonal 14716

# HPL - Additional info

Gene ID3091Gene NameHIF1A {ECO:0000303|PubMed:7539918}Other NamesGalectin-1, Gal-1, 14 kDa laminin-binding protein, HLBP14, 14 kDa lectin, Beta-galactoside-binding<br/>lectin L-14-I, Galaptin, HBL, HPL, Lactose-binding lectin 1, Lectin galactoside-binding soluble 1,<br/>Putative MAPK-activating protein PM12, S-Lac lectin 1, LGALS1 (<a<br/>href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=6561"<br/>target="\_blank">HGNC:6561</a>)

**Dilution** IHC-P~~Ready-to-use

Storage Maintain refrigerated at 2-8°C

Precautions

HIF-1α Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **HPL - Protein Information**

Name LGALS1 (HGNC:6561)

Function

Functions as a master transcriptional regulator of the adaptive response to hypoxia. Under hypoxic conditions, activates the transcription of over 40 genes, including erythropoietin, glucose transporters, glycolytic enzymes, vascular endothelial growth factor, HILPDA, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia. Plays an essential role in embryonic vascularization,



Cellular Location

Tissue Location

tumor angiogenesis and pathophysiology of ischemic disease. Heterodimerizes with **ARNT; heterodimer binds to core DNA** sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters (By similarity). Activation requires recruitment of transcriptional coactivators such as CREBBP and EP300. Activity is enhanced by interaction with both, NCOA1 or NCOA2. Interaction with redox regulatory protein APEX seems to activate CTAD and potentiates activation by NCOA1 and CREBBP. Involved in the axonal distribution and transport of mitochondria in neurons during hypoxia. Cytoplasm. Nucleus Nucleus speckle {ECO:0000250|UniProtKB:Q61221}. Note=Colocalizes with HIF3A in the nucleus and speckles (By similarity) Cytoplasmic in normoxia, nuclear translocation in response to hypoxia (PubMed:9822602). {ECO:0000250|UniProtKB:Q61221} Expressed in most tissues with highest levels in kidney and heart. Overexpressed in the majority of common human cancers and their metastases, due to the presence of intratumoral hypoxia and as a result of mutations in genes encoding oncoproteins and tumor suppressors. A higher level expression seen in pituitary tumors as compared to the pituitary gland

## **HPL - Protocols**

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

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

HPL - Images





colon



Immunohistochemical analysis of paraffin-embedded breast cancer tissue using AD80293 performed on the Abcarta® FAIP-30 Fully automated IHC platform.Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a Citrate buffer (pH6. 0).Samples were incubated with primary antibody(Ready-to-use) for 15 min at room temperature. AmpSeeTM Detection Systems[Abcepta:ADR005] was used as the secondary antibody.