10320 Camino Santa Fe, Suite G
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Anti-Galectin-1 / Human Placental Lactogen (hPL) Antibody
Mouse Monoclonal Antibody
Catalog # AH13361

Specification

Anti-Galectin-1 / Human Placental Lactogen (hPL) Antibody - Product Information

Application	**WB, IHC-P, IF, FC, E**
Primary Accession	P09382
Other Accession	445351
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG1, lambda**
Calculated MW	**14716**

Anti-Galectin-1 / Human Placental Lactogen (hPL) Antibody - Additional Information

Gene ID 3956

Other Names
14kDa laminin-binding protein; Beta-galactoside-binding lectin L-14-I; Gal-1; GAL1; Galaptin; Galectin-1; HLBP14; HPL; Lactose-binding lectin 1; Lect14; Lectin galactoside-binding soluble 1; LGALS1; MAPK activating protein MP12; S-Lac lectin 1

Application Note
WB~~1:1000<br \>IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50<br \>E~~N/A

Format
200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage
Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions
Anti-Galectin-1 / Human Placental Lactogen (hPL) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-Galectin-1 / Human Placental Lactogen (hPL) Antibody - Protein Information

Name LGALS1 (HGNC:6561)

Function
Lectin that binds beta-galactoside and a wide array of complex carbohydrates. Plays a role in regulating apoptosis, cell proliferation and cell differentiation. Inhibits CD45 protein phosphatase

activity and therefore the dephosphorylation of Lyn kinase. Strong inducer of T-cell apoptosis. Plays a negative role in Th17 cell differentiation via activation of the receptor CD69 (PubMed:24752896).

Cellular Location
Secreted, extracellular space, extracellular matrix. Cytoplasm. Secreted Note=Can be secreted; the secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum- Golgi intermediate compartment) followed by vesicle entry and secretion.

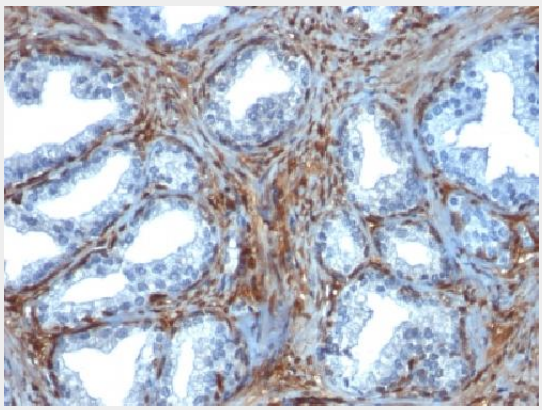
Tissue Location
Expressed in placenta, maternal decidua and fetal membranes. Within placenta, expressed in trophoblasts, stromal cells, villous endothelium, syncytiotrophoblast apical membrane and villous stroma. Within fetal membranes, expressed in amnion, chorioamniotic mesenchyma and chorion (at protein level). Expressed in cardiac, smooth, and skeletal muscle, neurons, thymus, kidney and hematopoietic cells.

Anti-Galectin-1 / Human Placental Lactogen (hPL) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Galectin-1 / Human Placental Lactogen (hPL) Antibody - Images



Formalin-fixed, paraffin-embedded Human Prostate Carcinoma stained with Galectin-1 Monoclonal Antibody (GAL1/1831).

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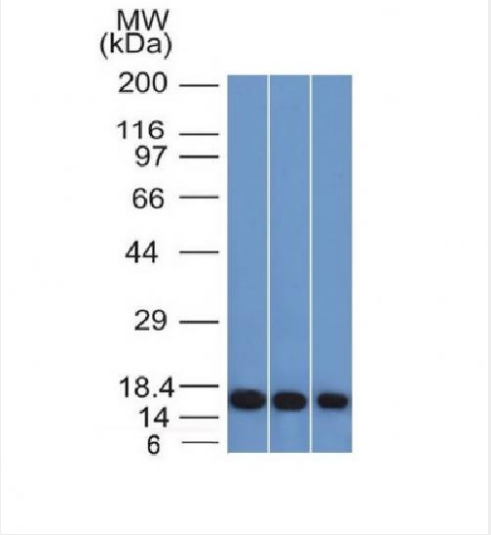

Western Blot of HeLa, A431, K562 and 293 Cell Lysates using Galectin-1 Monoclonal Antibody (GAL1/1831).

Anti-Galectin-1 / Human Placental Lactogen (hPL) Antibody - Background

Galectin-1 is a member of the beta-galactoside-binding family and is a dimeric protein of 14kD participating in a variety of normal and pathological processes, including cancer progression. Galectin-1 can affect the proliferation of normal and malignant cells. Inhibition of cell growth is observed in a lactose-dependent manner as lower concentrations of the lectin stimulate cell proliferation. Galectin-1 may also be implicated in the induction of apoptosis of activated T cells through the binding of exogenous galectin-1 to CD45 molecules present on the surface of lymphocytes. Galectin-1, reported to be present either at the surface of cancer cells or accumulated around these cells could act as an immunological shield to protect against a T cell immune response and provide an advantage for survival.