10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Mouse Monoclonal Antibody
Catalog # AH13361

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
Clone Names	GAL1/1831
Calculated MW	14716

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	ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA); ,Flow Cytometry (0.5-1ug/million cells in 0.1ml); Immunofluorescence (1-2ug/ml); ,Western Blotting (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 min at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
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.

Protein Information

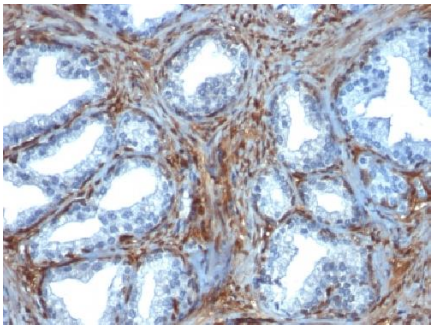
Name	LGALS1 (HGNC:6561)

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.

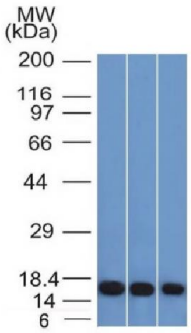
Background

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.

Images



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.