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LGALS3 Antibody (C-term)

Mouse Monoclonal Antibody (Mab)
Catalog # AM1951a

Product Information

Application	WB, E
Primary Accession	P17931
Other Accession	P17931, NP_002297.2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	320CT4.5.2
Calculated MW	26152
Antigen Region	163-191

Additional Information

Gene ID	3958
Other Names	Galectin-3, Gal-3, 35 kDa lectin, Carbohydrate-binding protein 35, CBP 35, Galactose-specific lectin 3, Galactoside-binding protein, GALBP, IgE-binding protein, L-31, Laminin-binding protein, Lectin L-29, Mac-2 antigen, LGALS3, MAC2
Target/Specificity	This LGALS3 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 163-191 amino acids from the C-terminal region of human LGALS3.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LGALS3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LGALS3 (HGNC:6563)
Synonyms	MAC2

Function	Galactose-specific lectin which binds IgE. May mediate with the alpha-3, beta-1 integrin the stimulation by CSPG4 of endothelial cells migration. Together with DMBT1, required for terminal differentiation of columnar epithelial cells during early embryogenesis (By similarity). In the nucleus: acts as a pre-mRNA splicing factor. Involved in acute inflammatory responses including neutrophil activation and adhesion, chemoattraction of monocytes macrophages, opsonization of apoptotic neutrophils, and activation of mast cells. Together with TRIM16, coordinates the recognition of membrane damage with mobilization of the core autophagy regulators ATG16L1 and BECN1 in response to damaged endomembranes.
Cellular Location	Cytoplasm. Nucleus. Secreted. Note=Secreted by a non- classical secretory pathway and associates with the cell surface. 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 (PubMed:32272059).
Tissue Location	A major expression is found in the colonic epithelium. It is also abundant in the activated macrophages. Expressed in fetal membranes.

Background

This gene encodes a member of the galectin family of carbohydrate binding proteins. Members of this protein family have an affinity for beta-galactosides. The encoded protein is characterized by an N-terminal proline-rich tandem repeat domain and a single C-terminal carbohydrate recognition domain. This protein can self-associate through the N-terminal domain allowing it to bind to multivalent saccharide ligands. This protein localizes to the extracellular matrix, the cytoplasm and the nucleus. This protein plays a role in numerous cellular functions including apoptosis, innate immunity, cell adhesion and T-cell regulation. Alternate splicing results in multiple transcript variants.

References

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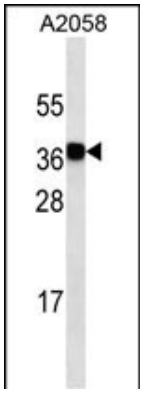
Zhou, J.Y., et al. J. Proteome Res. 9(10):5133-5141(2010)
Markowska, A.I., et al. J. Exp. Med. 207(9):1981-1993(2010)
Mazurek, N., et al. J. Biol. Chem. 275(46):36311-36315(2000)

Images



LGALS3 Antibody (C-term) (Cat. #AM1951a) western blot analysis in A2058 cell line lysates (35µg/lane).This demonstrates the LGALS3 antibody detected the LGALS3 protein (arrow).