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Anti-Galectin 3 Antibody [KO/KD Validated]

Catalog # AP51316

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P17931
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	26152

Additional Information

Gene ID	3958
Other Names	MAC2; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Galectin 3. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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).

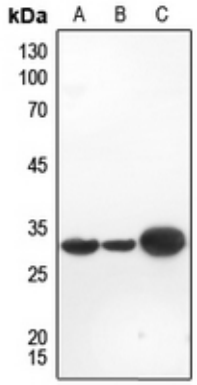
Tissue Location

A major expression is found in the colonic epithelium. It is also abundant in the activated macrophages. Expressed in fetal membranes.

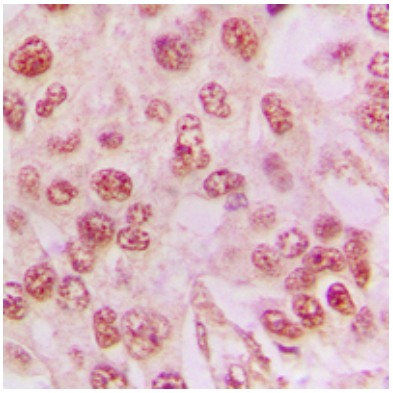
References

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Cherayil B.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:7324-7328(1990).
Oda Y.,et al.Gene 99:279-283(1991).
Raz A.,et al.Cancer Res. 51:2173-2178(1991).
Lotz M.M.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:3466-3470(1993).

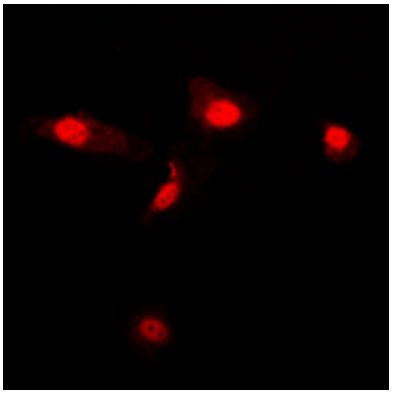
Images



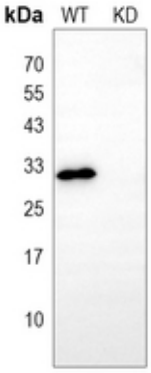
Western blot analysis of Galectin 3 expression in HEK293T (A), Hela (B), mouse kidney (C) whole cell lysates. (Predicted band size: 26 kD; Observed band size: 31 kD)



Immunohistochemical analysis of Galectin 3 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Galectin 3 staining in Jurkat cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.



Western blot analysis of Galectin 3 expression in wild type (WT) and knockdown (KD) HeLa cell lysates.

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