

PRODUCT DATA SHEET

Bioworld Technology,Inc.

LGALS9 mouse monoclonal antibody

Catalog: MB4002 Host: Mouse Reactivity: Human

BackGround:

Galectins are a family of β -galactose binding proteins that are characterized by an affinity for poly-N-acetyllactosamine-enriched glycoconjugates and a carbohydrate-binding site. Members of the galectin family have been implicated in a variety of biological functions, including cell adhesion, growth regulation, cytokine production, T-cell apoptosis, and immune responses.

Galectin-9 is induced by proinflammatory stimuli, including IFN-γ, TNF-α, and TLR ligands, and regulates various immune responses through interaction with its ligand TIM-3. Binding of galectin-9 to TIM-3 expressed by Th1 CD4 T cells resulted in T cell death. On the other hand, galectin-9 treatment of tumor-bearing mice increased the number of IFN-y-producing TIM-3+ CD8 T cells and TIM-3+ dendritic cells. Transgenic overexpression of either TIM-3 or galectin-9 in mice led to an increase in cells with a myeloid-derived suppressor cell phenotype and inhibition of immune responses. CD44 is also proposed to be a receptor for galectin-9, and interaction of galectin-9 with CD44 expressed by induced regulatory T (iTreg) cells enhanced the stability of function of iTreg cells. In addition, galectin-9 was recently demonstrated to bind Dectin-1 expressed by pancreatic ductal adenocarcinoma-infiltrating macrophages, resulting in tolerogenic macrophage reprogramming and suppression of anti-tumor immunity. Increased galectin-9 expression has been observed in several cancer types, including lung, liver, breast, and kidney. Alternative splicing of the galectin-9 transcript leads to several isoforms.

Product:

1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 39 kDa

Swiss-Prot:

O00182

Purification&Purity:

The antibody was affinity-purified from mouse ascites fluids or tissue culture supernatant by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB 1:2000

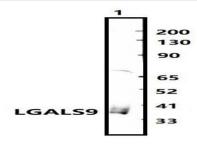
Storage&Stability:

Store at $4 \,\mathrm{C}$ short term. Aliquot and store at $-20 \,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

Isotype:

IgG2a

DATA:



Western blot (WB) analysis of LGALS9 mouse monoclonal antibody at 1:500 dilution.

Lane1:THP-1 whole cell lysate(30ug)

Note:

For research use only, not for use in diagnostic procedure.

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