

Recombinant Human Galectin-1 (LGALS1)

Cat No:HR2R1441

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	LGALS1
Gene ID	3956
Accession	P09382
Alternative Name	Beta-Galactoside-Binding Lectin L-14-I, Gal-1, 14 kDa laminin-binding protein, HLBP14, 14 kDa lectin, Galaptin, HBL, HPL, Lactose-binding lectin 1, Lectin galactoside-binding soluble 1, Putative MAPK-activating protein PM12, S-Lac lectin 1
Species	Human
Source	E. coli
Description	Galectin-1 is a member of the galectin family, and binds B-galactosidase moieties on glycoproteins or glycolipids. Galectins are primarily involved in modulation of cell-cell and cell-matrix interactions. Galectin-1 acts as a negative regulator of immunity, promoting immune suppression and lessening the inflammatory response. Galectin-1 binds CD45, CD3 and CD4, resulting in the inhibition of CD45 phosphatase dependant dephosphorylation of lyn kinase, as well as a number of other immune related receptors. Due to its function as a negative regulator of the immune response, and role inducing apoptosis in activated Th1 and Th17 cells, it is commonly found upregulated around malignant tumours. It has also been implicated as having a role in the development of immune tolerance during pregnancy, and is highly expressed at the maternal-fetal interface. As a dimer it down-regulates neutrophils by inducing exposure of phosphatidylserine, thereby marking the cell for apoptosis. It shares approximately 88% and 90% sequence similarity with mouse and rat galectin-1, respectively. Recombinant Human Galectin-1 is a 14.9kDa protein.
Functions	Measured by its ability to agglutinate human red blood cells. The ED(50) for this effect is typically 0.5?3 ?g/mL.
Formulation	Lyophilized from a 0.2 ?m filtered solution in PBS and 2-ME with BSA as a carrier protein.
Solubility	Reconstitute at 100 ?g/mL in sterile PBS containing at least 0.1% human or bovine serum albumin
Appearance	Lyophilized Powder
Molecular Weight	14.9
Purity	>95% as determined by SDS-PAGE
Concentration	< 1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature

Storage
Condition

The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2° - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

