

## Recombinant Human Galectin-3 (rh GAL-3)

**Synonyms:** IgE-binding protein, MAC2, Carbohydrate-binding protein 35 (CBP-35), Lectin-29 (L-29)

**Introduction:** Galectin-3 mediates with the alpha-3, beta-1 integrin the stimulation by cspg4 of endothelial cells migration. Galectin-3 plays an necessary part during the acquisition of vasculogenic mimicry and angiogenic properties associated with melanoma progression. GAL-3 overexpression is highly expressed in early stages of papillary carcinoma, and its expression intensity declines during tumor progression. Serum levels of GAL-3 are high in patients with thyroid malignancy but there is considerable overlap in serum GAL-3 concentrations between those with benign and malignant nodular thyroid disease. GAL-3 takes part as an immune regulator to inhibit T-cell immune responses and promote tumor growth, as a result providing a new mechanism for tumor immune tolerance.

**Description:** Recombinant human GAL-3 produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 250 amino acids and having a molecular mass of 26 kDa. The GAL-3 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from a concentrated solution containing 10mM sodium phosphate buffer, pH-7.5 and 50mM NaCl.

The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh GAL-3 in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized GAL-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GAL-3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

**Purity:** Greater than 97.0% as determined by

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

**Amino Acid:** ADFNSLHDAL SGSGNPNPQG WPGAWGNQPA GAGGYPGASY PGAYPGQAPP  
GAYPGQAPP AYHGAPGAYP GAPAPGVYPG PPSGPGAYPS SGQPSAPGAY PATGPYGAPA  
GPLIVPYNLP LPGGVVPRML ITILGTVKPN ANRIALDFQR GNDVAFHFNP RFNENNRVI VCNTKLDNNW  
GREERQSVFP FESGKPFKIQ VLVEPDHFKV AVNDAHLLQY NHRVKKLNEI SKLGISGDID LTSASYTMI

**Biological Activity :** Determined by its ability to chemoattract human blood monocytes. Chemotactic activity was observed at a concentration of 2 µg/ml with a peak response obtained at 220 µg/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	10 µg	Cat.N°	11344243
<i>medium</i>	50 µg	Cat.N°	11344245

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