

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Galectin-2 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2509A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived human Galectin-2 Met1-Glu132 Accession # P05162
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide.

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	HepG2 human hepatocarcinoma cell line fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012)

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

The galectins constitute a large family of carbohydrate-binding proteins with specificity for N-acetyl-lactosamine-containing glycoproteins. At least 14 mammalian galectins, which share structural similarities in their carbohydrate recognition domains (CRD), have been identified to date. The galectins have been classified into the prototype galectins (-1, -2, -5, -7, -10, -11, -13, -14), which contain one CRD and exist either as a monomer or a noncovalent homodimer; the chimera galectins (galectin-3) containing one CRD linked to a nonlectin domain; and the tandem-repeat galectins (-4, -6, -8, -9, -12) consisting of two CRDs joined by a linker peptide. Galectins lack a classical signal peptide and can be localized to the cytosolic compartments where they have intracellular functions. However, via one or more as yet unidentified non-classical secretory pathways, galectins can also be secreted to function extracellularly. Individual members of the galectin family have different tissue distribution profiles and exhibit subtle differences in their carbohydrate-binding specificities. Each family member may preferentially bind to a unique subset of cell-surface glycoproteins (1-4).

Galectin-2 is a monomeric or homodimeric prototype galectin that is expressed in hepatoma, stomach epithelial cells and in colorectal and neural tumors. The functions of Galectin-2 has not been reported. Human and mouse Galectin-2 share approximately 65% amino acid sequence similarity (1-4).

References:

1. Rabinovich, A. *et al.* (2002) Trends in Immunol. **23**:313.
2. Rabinovich, A. *et al.* (2002) J. Leukocyte Biology **71**:741.
3. Hughes, R.C. (2001) Biochimie **83**:667.
4. R&D Systems Cytokine Bulletin, Summer, 2002.

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