

Galectin-3 Assay Kit / Antibodies

- Research Use Only-

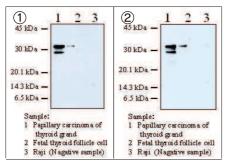
Assay Kit

Code No.	Name		Volume	Assay Range	Incubation Time	Application
27755	Human	Galectin-3 Assay Kit - IBL	96 Well	117.19 ~ 7,500 pg/mL	1st incubation, 37°C, 1hr 2nd incubation, 4°C, 30min	Human Serum, EDTA- Plasma, Cell culture supernatant, Cell extract and Tissue extract.

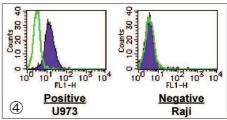
Antibodies

Code No.	Name			Volume	W/B	IHC	Remarks
11100	Anti-Human	Galectin-3 (38B2)	Mouse IgG MoAb	100 μg	2 ~ 5 μg/mL	2 ~ 5 μg/mL	Galectin-3 specific
11102	Anti-Human	Galectin-3 (87B5)	Mouse IgG MoAb	100 μg	2 ~ 5 μg/mL	-	Galectin-3 specific FACS 2 ∼ 10 µg/mL

Galectin is widely distributed in nematodes, insects, and porifers, as well as vertebrates, and it has also been found to be present in true fungi. Galectin does not just occur in the cytoplasm, it is also present in the nucleus, on the cell surface, in the extracellular matrix, etc., and it is thought to be involved in many biological phenomena, including development, differentiation, morphogenesis, tumor metastasis, cell death, and RNA splicing. Galectin-3 is a β -galactoside-binding protein that has been named IgE-binding protein, CBP35, CBP30, Mac-2, L-29, L-31, L-34, etc., and structurally it is a chimera-type lectin composed of a sugar-chain-binding domain (galectin domain) and a non-lectin domain. Its biological function is still uncertain, but many studies that should elucidate its function have been performed, and as a result participation of galectin-3 has been demonstrated in the biological phenomena of cell growth, adhesion, metastasis, and apoptosis. For example, a positive correlation has been shown between galectin-3 expression and the degree of malignant transformation in certain types of cell lines. A positive correlation has also recently been shown between galectin-3 expression and degree of malignancy in certain types of malignant tumors, and measurement of galectin-3 is expected to possibly serve as an index of degree of tumor malignancy.

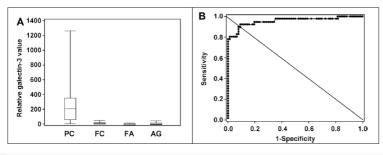






- 11100 Western blotting
 11100 Western blotting
- ③ 11100 Immunohistochemistry (thyroid gland cancer)
- 4 11102 FACS

Stratification of thyroid lesions by relative galectin-3 value (ref. 1)



- (A) Relative galectin-3 value in thyroid lesions. The box represents the difference between the 25th and 75th percentiles, whereas the horizontal line inside the box represents the median. Whiskers are drawn from the ends of the box to the maximum and minimum values. PC, papillary carcinoma; FC, follicular carcinoma; FA, follicular adenoma; AG, adenomatous goiter.
- B) Receiver-operating characteristic curves for relative galectin-3 value in the diagnosis of papillary carcinoma. A diagonal line represents an equality of sensitivity and specificity.

Reference

- 1 Cytoplasmic and serum galectin-3 in diagnosis of thyroid malignancies. Inohara H, Segawa T, Miyauchi A, Yoshii T, Nakahara S, Raz A, Maeda M, Miyoshi E, Kinoshita N, Yoshida H, Furukawa M, Takenaka Y, Takamura Y, Ito Y, Taniguchi N. Biochem Biophys Res Commun. 2008 Nov 21;376(3):605-10.
- 2. Ochieng J, Platt D, Tait L, Hogan V, Raz T, Carmi P, Raz A. Structure-function relationship of a recombinant human galactoside-binding protein. Biochemistry. 1993 Apr 27;32(16):4455-60.
- 3. van den Brule F, Califice S, Castronovo V. Expression of galectins in cancer: a critical eview.Glycoconi J. 2004;19(7-9):537-42.
- 4. Takenaka Y, Fukumori T, Raz A. Galectin-3 and metastasis. Glycoconj J. 2004;19(7-9):543-9.
- 5. Yang RY, Liu FT. Galectins in cell growth and apoptosis. Cell Mol Life Sci. 2003 Feb;60(2):267-76.
- 6. Liu FT, Patterson RJ, Wang JL. Intracellular functions of galectins. Biochim Biophys Acta. 2002 Sep 19;1572(2-3):263-73.

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