CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Galectin-8, Human, clone 106.1		
Catalog number	HM2278-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA	**Concentration**	100 µg/ml
Host Species	Mouse IgG2a/IgG2b	**Conjugate**	None
Endotoxin	<24 EU/mg	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #				2	1,2	1,2		
Yes				●	●	●		
No								
N.D.	●	●	●				●	●

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. For functional studies, in vitro dilutions have to be optimized in user's experimental setting.

General Information

Description

Galectins are animal lectins that can specifically bind beta-galactosides. Thirteen galectins have already been described, belonging to three different groups: prototype, tandem-repeat and chimeric. Galectins are involved in cellular interactions and neoplastic transformations. Galectin-8, is a 34 kDa protein made of tandem-repeat carbohydrate recognition domains (CRDs), joined by a 'link' peptide. Structurally, galectin-8 belongs to the tandem-repeat type galectins. The galectin-8 gene (LGALS8) encodes numerous mRNAs by alternate splicing and the presence of three unusual polyadenylation signals. These mRNAs could encode for six isoforms of galectin-8, of which three belong to the tandem-repeat galectin group (with two carbohydrate binding domains) and the three others to the prototype group (one carbohydrate binding domain). Galectin-8, like other galectins, is a secreted protein. Upon secretion galectin-8 acts as a physiological modulator of cell adhesion. When immobilized, it functions as a matrix protein equipotent to fibronectin in promoting cell adhesion by ligation and clustering of a selective subset of cell surface integrin receptors. Although galectin-8 is a fairly abundant protein, it is not ubiquitously expressed. It shows a micro-clustering pattern reminiscent of that seen with proteins associated with mitochondria, the Golgi or trans-Golgi membranes. Studies of galectin-8 revealed that galectin-8 positively or negatively regulates cell adhesion, depending on the extracellular context. Cell adhesion to galectin-8 triggers integrin-mediated signalling cascades such as Tyr phosphorylation of FAK and paxillin. Galectin-8 is widely expressed in normal tissues (brain, breast, colon, retina, kidney, pancreas, placenta, spleen, testis, uterus, vascular, esophagus and heart) as well as in tumor tissues (brain, breast, colon, germ cells, head and neck, kidney, muscles, ovary, pancreas, thyroid, placenta, prostate, uterus, lung, stomach and esophagus).

Immunogen

Recombinant rat Galectin-8.

Aliases

Gal-8, PCTA1, PCTA-1, Po66-CBP, LGALS8.

Cross reactivity

Rat: Yes.

References

1. Levy, Y et al; Galectin-8 functions as a matricellular modulator of cell adhesion. J Biol Chem 2001, *276*: 31285.
2. Eshkar Sebban, L et al; The involvement of CD44 and its novel ligand Galectin-8 in apoptotic regulation of autoimmune inflammation. J Immunol 2007, *179*: 1225.

Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC	Date
Brenda Teunissen	09/12/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.