Aeonian Biotech
Your choice for selective antibodies

Cat nr AE00283 **Product Datasheet**

Mouse Monoclonal Antibody, clone GAL1/1831 to:

Gal-1, Galectin-1

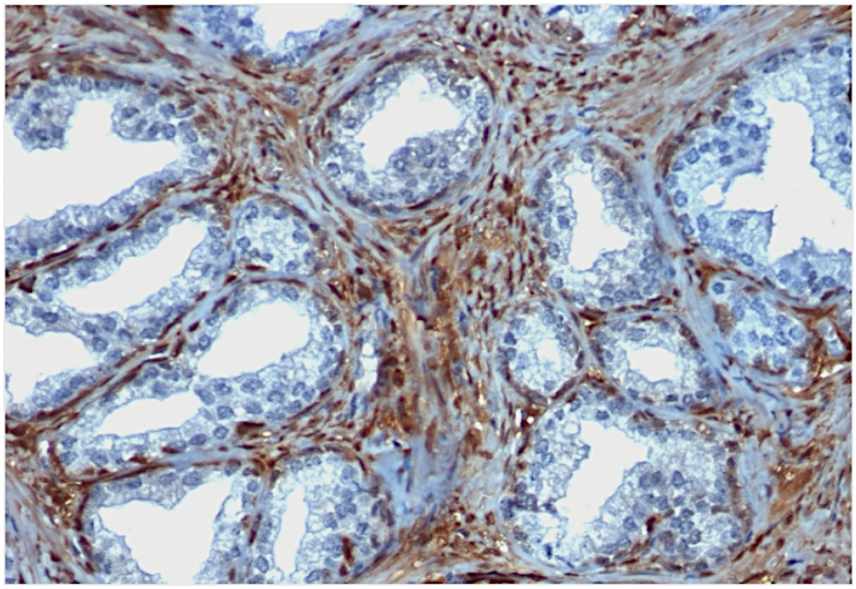
GAL1; GAL-1; GBP; LGALS1; 14 kDa laminin-binding protein; 14 kDa lectin; HLBP14; Beta-galactoside-binding lectin L-14-I; Galaptin; HBL; HPL; Lactose-binding lectin 1; Lectin galactoside-binding soluble 1; Putative MAPK-activating protein PM12; S-Lac Lectin 1

Cellular localization	Secreted, secretory vesicles
Official Symbol (Gene)	LGALS1
GeneID	3956
SwissProt	P09382
Confirmed Applications	ICC, IHC, PA, WB
Positive controls	HeLa, K562, HEK293, JEG3, prostate, kidney, placenta, stomach, skin, spleen, brain, heart
Aeonian Rating©	82
Purification	By Protein G from bioreactor concentrate
Formulation ☐	200ug IgG/ml in PBS, 0.05% BSA, 0.05% azide (20ug or 100ug)
☐	1mg IgG/ml in PBS (100ug or contact us for quotation)
Amount	☐ 20ug ☐ 100ug
Isotype	Mouse IgG1, lambda
Confirmed species reactivity	Human
Immunogen	Recombinant fragment within aa 12-108 region of human Galectin-1 protein (exact sequence is proprietary)
Epitope	Within aa 12-108 region
Storage instructions	Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light.
Expiration	Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below.
Warranty	This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund.
Liability	This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.
Product performance	see next page

Product data:

ImmunoHistoChemistry (IHC):

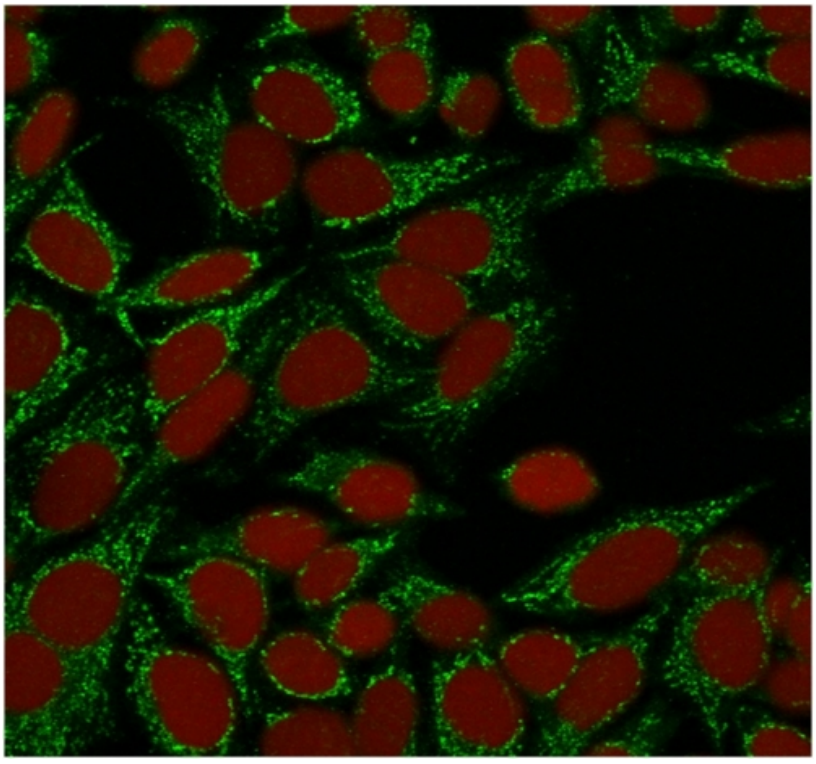
This product was successfully used to stain human prostate carcinoma sections. Recommended concentration: 0.3-1ug/ml



Formaldehyde-fixed, paraffin-embedded human prostate carcinoma stained with Galectin-1 Mouse Monoclonal Antibody AE00283 at 0.5-1ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

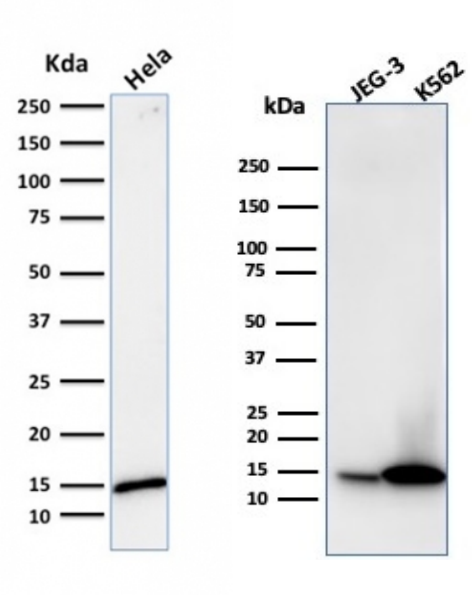
ImmunoCytoChemistry (ICC):

This product shows staining of secretory vesicles in cell line HeLa. Recommended concentration: 1-3ug/ml



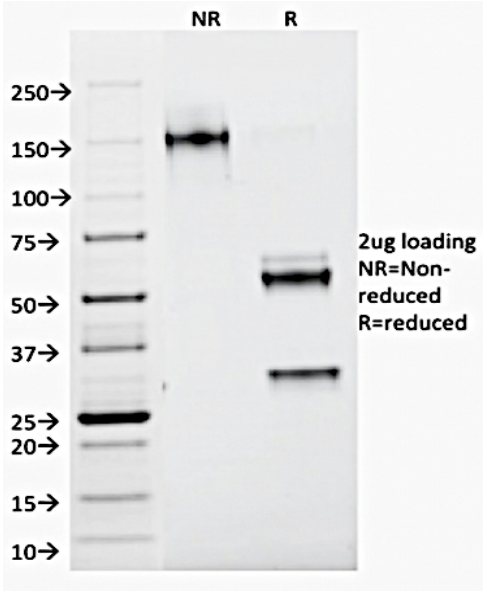
Confocal microscopy of HeLa stained with Galectin-1 Mouse Monoclonal Antibody AE00283 at 1-2ug/ml (1h at ambient temp). Detection by CF488 (green) for the antibody and RedDot (red) for nuclear staining.

Western Blot (WB):
This product was successfully used to stain an approx. 15kDa band in human cell line lysates.
Recommended concentration: 1-3ug/ml



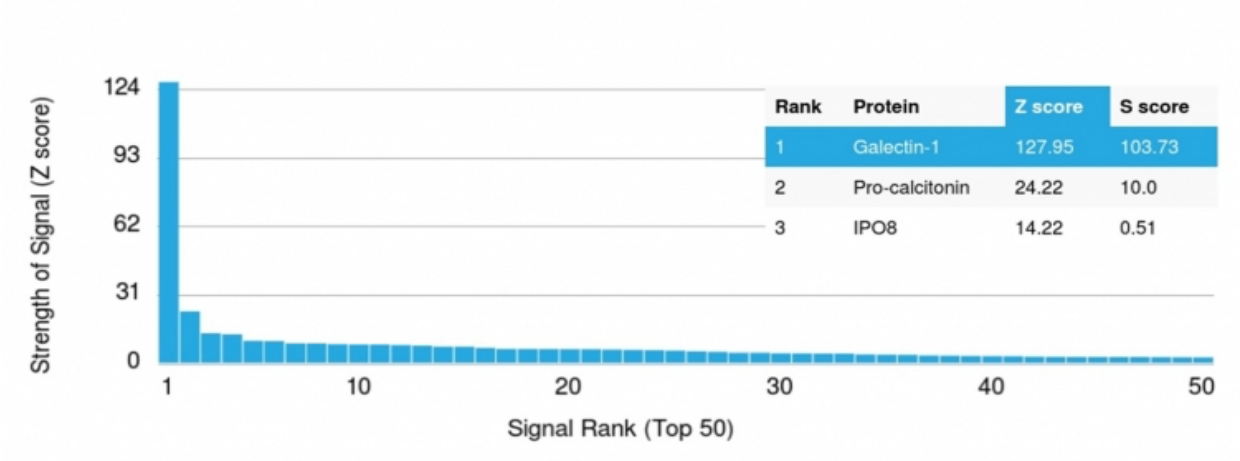
Western Blot of a human cell line lysates (30ug) stained with Galectin-1 Mouse Monoclonal Antibody AE00283 at 1ug/ml (1h at ambient temp). ECL staining by HRP.

SDS-PAGE Analysis of Purified Galectin-1 Mouse Monoclonal Antibody AE00283. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00283 under non-reduced and reduced conditions, showing intact IgG at around 150kDa (NR) and intact heavy and light chains at 60kDa and 30kDa resp. (R).

Specificity and selectivity of AE00283 to Gal-1 were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against H. sapiens revealed no closely related other proteins.



Cross-reactivity assessment of Galectin-1 Mouse Monoclonal Antibody AE00283 (1ug/ml) on CDI's Protein Array containing more than 19,000 full-length human proteins.

The Z-score represents the strength of a signal that an antibody (through a fluorophore-tagged secondary reagent) produces when binding to a particular protein on the array. Z-scores are in units of standard deviations (SD's) above the mean value of all signals generated on that array. When Z-scores are arranged in descending order, the difference between two successive values will be the S-score for the first. Thus, the S-score represents the relative specificity of the antibody to its intended target. An antibody is considered specific to its intended target, when it has an S-score of at least 2.5. For example, if an antibody binds to intended protein X with a Z-score of 43 and to the cross-reacting protein Y with a next Z-score of 14, then the S-score for the antibody to intended target X equals 29 (43-14).