

# CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

**Product name** Galectin-2, Human, clone H3F3D1

Catalog number HM2306

Lot number - Expiry date -

Formulation 0.2 μm filtered in PBS+0.1%BSA+0.02%NaN3 Concentration 100 μg/ml

Host Species Mouse IgG1 Conjugate None

Endotoxin N.A. Purification Protein G

Storage 4°C

### **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
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.

### **General Information**

## Description

The monoclonal antibody H3F3D1 reacts with galectin-2. Galectins are  $\beta$ -galactoside-binding lectins. They have a characteristic carbohydrate recognition domain (CRD) and are widely expressed in a wide range of organisms. Galectins are involved in the regulation of cell proliferation, inflammation, cell adhesion and cell death. Based on structural features, mammalian galectins have been classified as proto, chimera or tandem repeats. Galectin-2 is of the proto type. Proto types contain one CRD per subunit and are usually homodimers of non-covalently linked subunits. Although galectins lack a typical secretion signal peptide, they are present not only in the cytosol and the nucleus, but also in the extracellular space. During the infection process, galectins have diverse effects on cells involved in innate immune responses, including macrophages, dendritic cells, neutrophils and mast cells. For example many hostmicroorganism interactions have been shown to involve protein-carbohydrate recognition. Thereby facilitating the interaction with colonizing microorganism, or initiate innate and adaptive immune responses against the pathogen. Galectin-2 is structurally related to galectins-1 (43% sequence identity to gal-1), but is primarily expressed in the gastrointestinal tract and induces apoptosis in activated T-cells. Human and mouse gal-2 share ca 65% amino acid sequence similarity. The exact function of gal-2 remains unclear until now. Interaction studies showed binding of gal-2, present in macrophages and smooth muscle cells, to lymphotoxin-α and also α-and β-tubulins, implicating involvement in regulation of cytokine secretion relevant for the pathogenesis of myocardial infarction. Furthermore, Gal-2 has proven growth-regulatory activity, is reactive with apoptotic cells, and has the potential to modulate cell adhesion.

Immunogen Recombinant human galectin-2

Aliases Beta-galactoside-binding lectin L-14-II, HL14, Lactose-binding lectin 2, S-Lac lectin 2

Cross reactivity Mouse: Weak.

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

Version: 02-2018

#### **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 Robbert Zwinkels

Date 16/03/2018

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.