

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Mucin-1, Human, clone HMFG2	Expiry date	-
Catalog number	HM2396-100UG	Amount	100 µg
Lot number	-	Concentration	100 µg/ml
Volume	1 ml	Conjugate	None
Formulation	0.2 µm filtered in PBS+0.1%BSA	Purification	Protein G
Host Species	Mouse IgG1		
Endotoxin	N.A.		
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.

- FC: Extracellular staining was used with antibody HMFG2.
- W: Reduced and non-reduced can be used. The expected band sizes are 75 and 120kDa.

General Information

Description	Monoclonal antibody clone HMFG2 recognizes human mucin-1 (Muc1). Mucins are high-molecular mass glycoproteins with peptide repeat domains and a dense O-glycosylation. Mucus is a biological hydrogel covering epithelial surfaces, including the eyes, lungs, stomach and reproductive system. It functions as a barrier to mucosal pathogens and to prevent damage from mechanical forces. Mucins consist of a family of over 20 members of which muc1 is one of most extensively studied member. MUC1 consists of a large, extracellular, O-glycosylated polypeptide backbone that extends 200–500 nm above the apical surface; a transmembrane domain that can be cleaved and enables shedding of the extracellular domain; and a cytoplasmic tail capable of signaling. Muc1 is involved diverse cellular responses including cell proliferation, growth, differentiation, migration, invasion, survival and secretion of growth factors, and cytokines being considered as a molecular sensor and signal transducer. Furthermore, MUC1 has been demonstrated to play a dynamic role in protection of the host from infection by a wide variety of pathogens and to regulate inflammatory responses to infection. This role is modulated via the inflammasome receptors. Besides its role in cancer, altered MUC1 expression levels and glycosylation patterns have also been associated with patients with inflammatory bowel diseases such as ulcerative colitis and Crohn's disease.		
Immunogen	Synthetic peptide from cytoplasmic tail of human MUC1 protein		
Aliases	MUC-1, Breast carcinoma-associated antigen DF3, Cancer antigen 15-3, CA 15-3, Carcinoma-associated mucin, Episialin, H23AG, Krebs von den Lungen-6, KL-6, PEMT, Peanut-reactive urinary mucin, PUM, Polymorphic epithelial mucin, PEM, Tumor-associated epithelial membrane antigen, EMA, Tumor-associated mucin, CD227		
Gene	Gene name: MUC1	Entrez ID: 4582	Uniprot: P15941

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
Brenda Teunissen

Date
26/06/2020

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