CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	ADAMTS-13, Human, clone 20A5		
Catalog number	HM2226-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
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.

- W: the monoclonal antibody is useful for Western blotting under non-reducing conditions.

General Information

Description

The monoclonal antibody 20A5 recognizes human ADAMTS-13, A Disintegrin And Metalloprotease with ThromboSpondin type 1 domain 13. ADAMTS-13 is produced by hepatic stellate cells and in smaller amounts by human endothelial cells, and is present in plasma at a concentration of approximately 1 ug/ml. ADAMTS-13 is a zinc-containing metalloprotease belonging to the ADAMTS family characterized by a protease domain, an adjacent disintegrin-like domain, one or more thrombospondin type 1 repeats, a cystein-rich domain and a typical spacer region. ADAMTS-13 is composed of a series of domains (amino to carboxy terminal): metalloprotease, disintegrin-like, central thrombospondin-1 (TSP-1), cysteine-rich, spacer, seven additional TSP-1 domains and two unique CUB domains. ADAMTS-13 has no hydrophobic transmembrane domain, and hence it is not anchored in the cell membrane. The apparent molecular weight is 170 or 190 kDa on non-reducing or reducing SDS-PAGE, respectively. ADAMTS-13 has an important function in haemostasis, where it catalyzes the cleavage of the peptide bond between tyrosine-1605 and methionine-1606 in the A2 domain of von Willebrand Factor (VWF), resulting in 2 electrophoretic reduced fragments of 176 and 140 kDa, respectively. This process renders large multimers less adhesive and hence less reactive in the setting of thrombus formation. ADAMTS-13 is therefore said to be a natural anti-thrombotic agent. Severe ADAMTS-13 deficiency is associated with systemic microvascular thrombosis in familial or acquired thrombotic thrombocytopenic purpura (TTP). The accumulation of non-cleaved large VWF multimers causes spontaneous systemic platelet aggregation blocking oxygen supply to vital organs. This life-threatening disorder can lead to ischemic disease with (multiple) organ failure. The monoclonal antibody 20A5 recognizes the central to C-terminal TSP-1 repeats 2 to 5 of ADAMTS-13 (amino acid 686-894).

Aliases

Von Willebrand Factor-Cleaving Protease (VWFCP)

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
07/12/2020

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