

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Beta2-adrenoceptor, Human, clone 6H8		
Catalog number	HM2238-20UG		
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 IgG1	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 #				1	1,2	1		
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: A431 human epidermoid cells in suspension for 1 h at 4°C in PBS containing monoclonal Antibody 6H8 (260 nM). After 1 h of incubation, the cells were fixed with 2% Formaldehyde (Ref.1)
- FS: Antibody 6H8 functions as an agonist in neonatal rat cardiomyocytes (Ref 1). Furthermore, Fab fragments of agonist-like antibody 6H8 behave as antagonist. (Ref 2).
- IA: The antibody against beta2-adrenoceptor is useful as detector in an ELISA setting (Ref1).
- Positive control: Human epidermoid carcinoma cell A431 line

General Information

Description	The monoclonal antibody 6H8 recognizes human beta2-adrenoceptor. The b ₂ -adrenoceptors can be divided into b ₁ , b ₂ , b ₃ and b ₄ -adrenoceptors defined in terms of agonist potencies, b ₂ -adrenoceptors displayed a higher selectivity for nor-adrenaline than for adrenaline. B ₂ -receptors are mainly postsynaptic and are located on a number of tissues including blood vessels, bronchi, GIT, skeletal muscle, liver and mast cell. Activation results in vasodilatation, bronchodilation, relaxation of the GIT, glycogenolysis in the liver, tremor in skeletal muscle and inhibition of histamine release from mast cells. Transduction is via G-proteins coupled to the intracellular second messenger adenylate cyclase. B-receptors are positively coupled to adenylate cyclase via activation of G _s G-protein, however activation of the b ₂ -adrenoceptors results in stimulation and inhibition of adenylate cyclase. The b ₂ -receptor selective agonists are widely used in the treatment of asthma and other related bronchospastic conditions. They are commonly used in the treatment of angina pectoris, cardiac arrhythmia and for the long-term treatment of patients who survive myocardial infarction. B-receptor antagonists have also been used as anti-hypertensive for a number of years. Beta-blockers have also proven useful in the treatment of conditions such as migraine, anxiety disorders, hyperthyroidism, alcohol withdrawal and when applied topically are useful in the treatment of glaucoma and ocular hypertension.
Immunogen	Free peptide Beta2-H19C
Aliases	B2-Adrenoceptor
Cross reactivity	Rat: Yes; Guines pig: Yes.
References	<ol style="list-style-type: none"> Lebesgue, D et al; An agonist-like monoclonal antibody against the human beta2-adrenoceptor. Eur J Pharmacol 1998, 348: 123. Mijares, A et al; From agonist to antagonist: Fab fragments of an agonistic-like monoclonal anti-beta2-adrenoceptor antibody behaves as antagonists. Mol Pharmacol 2000, 58: 373.
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.