

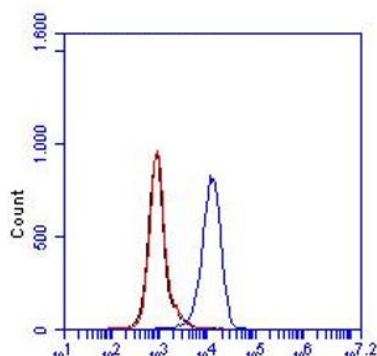
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	IGF-1R, Human, clone 1B1		
Catalog number	HM2340-20UG		
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 IgG2b	Conjugate	None
Endotoxin	N.A.	Purification	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #			1	1		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



FC: Flow cytometric detection of human IGF-1R name in THP-1 cells. Red, black and blue line represents respectively the control, cells only and HM2340 in a concentration of 10µg/ml.

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.

- IA: HM2340 can be used as a detection antibody.
- IF: The cells were incubated with anti-IGF-1R MAb 1B1 for 60 min at room temperature and then fixed with 3.7% formaldehyde in PBS for 15 min at room temperature, followed by detection with Alexa 488-conjugated anti-mouse IgG (ref.1).

General Information
Description

Monoclonal antibody HM2340, clone 1B1 recognizes human insulin growth factor 1 receptor. IGF-1R is a heterotetrameric transmembrane tyrosine kinase receptor expressed by many cells like lymphoid and myeloid cells as well as non haematopoietic cells. The receptor consists of two extracellular α subunits and two β subunits with tyrosine kinase activity. Receptor autophosphorylation follows by binding of its ligands insulin-like growth factor 1 and 2. The IGF/IGF-1R pathway plays important and diverse roles in tissue development and function, cell cycle progression, apoptosis and translation of proteins. IGF-1R regulates normal as well as pathological responses opening opportunities for therapeutic intervention. IGF-1R bears structural and functional resemblance to other tyrosine kinase receptors. Upon IGF binding the receptor is activated and autophosphorylated at the tyrosine residues in intracellular subunits leading to signaling via MAPK and PI3K/Akt pathways. Many tumors and transformed cells have altered IGF-1R expression. Recently the receptor came under the attention of roles in immune regulation. Proinflammatory cytokines, of which many share signaling components like Erk MAP kinases, seem to dampen several components of the IGF pathway. Furthermore, IGF regulates diverse

aspects of T-cell, B-cell and monocyte function suggesting a role in pathogenesis of diseases where immunity is altered, like rheumatoid arthritis and IBD. Antibody 1B1 recognizes the extracellular domain of IGF-1R.

Immunogen	Recombinant IGF-1R (aa 1-932)
Aliases	Insulin-like growth factor 1 receptor, IGF-I receptor, IGF-1R, CD221
Gene	Gene name: IGF1R
References	1. Nakadate, Y et al; Generation of a Monoclonal Antibody Against the Extracellular Domain of IGF-1R. Monoclonal antibodies in immunodiagnosis and immunotherapy, 2014, 2:126
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
28/12/2020

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