

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	IL-13R-alpha-1, Mouse, clone 1G3		
Catalog number	HM1140-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.02%NaN3+0.1%BSA	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.

- FC: CTLL-2-IL-13Rα1+ cells (3 × 10⁶ cells per well) were incubated with FcR blocking reagent and purified 1G3 mAb (2 µg/mL) was added and incubated on ice for 30 minutes. Excess antibody was removed by washing cells with buffer and bound anti-IL-13Rα1 antibody was detected with goat anti-mouse IgG (Fab')₂-PE (1 µg/well) (Ref.1).
- IP: Intestinal epithelial cells from adult IL-13Rα1^{-/-} and IL-13Rα1^{+/+} mice were lysed and incubated with purified anti-IL-4Rα (1 µg), anti-IL-13Rα1 (2 µg) (1G3), or anti-β actin (0.5 µg) at 4°C overnight (Ref.1).
- W: A reduced sample treatment was used. Expression of IL-13Rα1 in intestinal, lung and liver cells of neonatal and adult IL-13Rα1^{+/+} BALB/c mice as determined by western blot using an anti-IL-13Rα1 mAb. Intestinal epithelial cells from adult and neonatal IL-13Rα1^{-/-} mice were included as a negative control (Ref.1).

General Information

Description	<p>Mouse monoclonal antibody clone 1G3 recognizes mouse Il-13Ralpha1. Il-13 is a cytokine secreted by activated TH2 cells and is important mediator of allergic inflammation. Il-13 signals via interaction with a heterodimeric receptor of Il-4Rα and IL-13Rα. The IL13Rα consist of two cognate receptors, Il13-Rα1 and Il-13Rα2, which are expressed on a wide variety of cells among others B-cells, basophils, eosinophils, and macrophages. IL-13Rα1 is a glycosylated protein of ca 710KD. The receptor itself has a low affinity for IL13. However when paired with Il-4 it has a strong affinity for IL-13. After cytokine binding the receptor signals via JAK/STAT pathway. The heterodimeric receptor signal both with Il-13 and Il-4. Both cytokines have consequently quite comparable function. Il-13Rα2 and the recently discovered soluble Il-13Rα1 are thought to be decoy receptors for Il-13.</p> <p>Il-13 have been associated with diseases like asthma and idiopathic pulmonary fibrosis. Several studies have indeed shown the regulating role of Il-13 in airway hyper-reactivity leading to e.g. mucus secretion, chemokine production and IgE production. There are also indications that IL-13Rα1 is involved in macrophages differentiation and might serve as a biomarker for the M2 population.</p>
Immunogen	Extracellular mouse IL-13Rα1
Aliases	Interleukin-13 receptor subunit alpha-1, IL-13 receptor subunit alpha-1, IL-13R subunit alpha-1, IL-13R-alpha-1, IL-13RA1, Cancer/testis antigen 19, CT19, CD213a1
Gene	Gene name: IL13RA1, IL13R, IL13RA Entrez Gene ID 3597 Uniprot P78552
References	1. Dhakal, M et al; IL-13Rα1 is a surface marker for M2 macrophages influencing their differentiation and function. Eur J Immunol. 2013, 44:842
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
13/11/2020

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