

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	GILT, Mouse, clone MaP.mGILT6		
<b>Catalog number</b>	HM1128-100UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	1 ml	<b>Amount</b>	100 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	None
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #			2-5				1-3	
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.

**General Information**

<b>Description</b>	Antibodies derived from clone MaP.mGILT6 recognize mouse gamma-interferon-inducible lysosomal thiol reductase (GILT). GILT facilitates major histocompatibility complex (MHC) class II-restricted processing through reduction of protein disulfide bonds in the endocytic pathway. GILT can also facilitate the transfer of disulfide-containing antigens into the cytosol, enhancing their cross-presentation by MHC class I. Human GILT consists of 261 amino acids with a 37 amino acid signal sequence and a 224 amino acid precursor form. In general, the 35 kDa precursor is tagged with mannose-6- phosphate (M6P) residues and transported to the endocytic pathway via the M6P receptor (M6PR). A small fraction of the precursor is secreted as a disulfide-linked dimer. In early endosomes, N- and C-terminal pro-peptides are cleaved to generate a 28 kDa mature form. The mature form of GILT is localized to late endosomes and lysosomes and has maximal reductase activity at the acidic pH found in these compartments. GILT is constitutively expressed in professional antigen presenting cells (APC). The constitutive expression of GILT in APCs is likely to account for enhanced reduction of proteins in the late endosomal, lysosomal, and phagosomal compartments. A combination of GILT-mediated reduction and proteolysis in the these compartments can enhance the generation of class II epitopes as well as facilitate the translocation of internalized antigens into the cytosol for proteosomal processing and cross-presentation. It is also constitutively expressed in thymocytes, mature T cells, and some fibroblasts. IFN-γ plays is the key factor in inducing expression of MHC class II and other components of the class II-restricted processing pathway. IFN-γ signals through a specific cell surface receptor followed by activation of JAK/STAT1 signaling.
<b>Immunogen</b>	Insect-cell expressed recombinant mouse GILT
<b>Aliases</b>	Lfi30, Interferon-gamma-inducible lysosomal reductase
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
<b>Precautions</b>	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  
12/11/2019

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).