ARG42832
anti-MR1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MR1
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MR1
Species	Human
Immunogen	Recombinant protein corresponding to R23-D269 of Human MR1.
Conjugation	Un-conjugated
Alternate Names	Major histocompatibility complex class I-related gene protein; MHC class I-related gene protein; Class I histocompatibility antigen-like protein; HLALS

Application Instructions

Application table

Application	Dilution
FACS	1:150 - 1:500
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 39 kDa

Properties

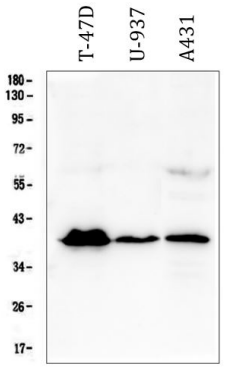
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

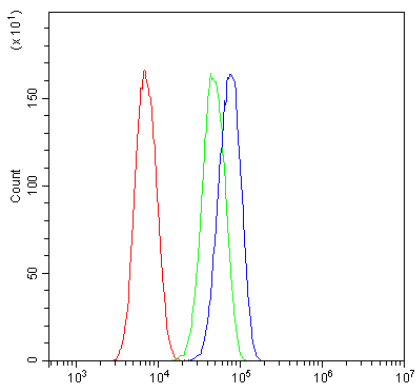
Gene Symbol	MR1
Gene Full Name	major histocompatibility complex, class I-related
Background	MAIT (mucosal-associated invariant T-cells) lymphocytes represent a small population of T-cells primarily found in the gut. The protein encoded by this gene is an antigen-presenting molecule that presents metabolites of microbial vitamin B to MAITs. This presentation may activate the MAITs to regulate the amounts of specific types of bacteria in the gut. Several transcript variants encoding different isoforms have been found for this gene, and a pseudogene of it has been detected about 36 kbp upstream on the same chromosome. [provided by RefSeq, Jul 2015]
Function	Antigen-presenting molecule specialized in presenting microbial vitamin B metabolites. Involved in the development and expansion of a small population of T-cells expressing an invariant T-cell receptor alpha chain called mucosal-associated invariant T-cells (MAIT). MAIT lymphocytes are preferentially located in the gut lamina propria and therefore may be involved in monitoring commensal flora or serve as a distress signal. Expression and MAIT cell recognition seem to be ligand-dependent. [UniProt]
Calculated Mw	39 kDa
PTM	N-glycosylated. [UniProt]
Cellular Localization	Cell membrane; Single-pass membrane protein; Extracellular side. Endoplasmic reticulum. Isoform 4: Secreted. Isoform 3: Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane. Note=The larger proportion remains in the ER in an immature state. The subset that reach cell surface does it through a B2M-independent pathway. [UniProt]

Images



ARG42832 anti-MR1 antibody WB image

Western blot: 50 µg of sample under reducing conditions. T-47D, U-937 and A431 whole cell lysates stained with ARG42832 anti-MR1 antibody at 0.5 µg/ml dilution, overnight at 4°C.



ARG42832 anti-MR1 antibody FACS image

Flow Cytometry: SiHa cells were blocked with 10% normal goat serum and then stained with ARG42832 anti-MR1 antibody (blue) at 1 µg/10^6 cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 µg/10^6 cells) used under the same conditions. Unlabelled sample (red) was also used as a control.