

# ARG22601 anti-TLR3 antibody [11F8]

Package: 50 µg Store at: -20°C

#### **Summary Product Description** Rat Monoclonal antibody [11F8] recognizes TLR3 Antibody This antibody recognizes mouse TLR3, otherwise known as CD283 or Toll-like receptor 3. CD283 is a 905 amino acid ~105 kDa single pass type 1 transmembrane glycoprotein associated with endosomal membranes and member of the Toll-like receptor (TLR) family. CD283 functions as a receptor for double-stranded RNA (UniProt: Q99MB1).TLRs are expressed on the cell surface and the endocytic compartment and recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents. They also initiate cell signalling to induce production of cytokines necessary for the innate immunity and subsequent adaptive immunity. **Tested Reactivity** Ms **Tested Application** CyTOF®-candidate, FACS, ICC/IF Host Rat Clonality Monoclonal Clone 11F8

Target Name	TLR3
Species	Mouse
Immunogen	Purified murine TLR3 extracellular domain protein.
Conjugation	Un-conjugated
Alternate Names	Toll-like receptor 3; CD antigen CD283; CD283; IIAE2

lgG2a

## **Application Instructions**

Isotype

Application table	Application	Dilution
	CyTOF <sup>®</sup> -candidate	Assay-dependent
	FACS	1:25 - 1:200
	ICC/IF	Assay-dependent
Application Note	FACS: Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

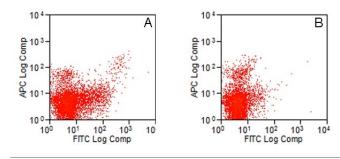
### **Properties**

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide

Concentration	1 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	Tlr3
Gene Full Name	toll-like receptor 3
Background	The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This receptor is most abundantly expressed in placenta and pancreas, and is restricted to the dendritic subpopulation of the leukocytes. It recognizes dsRNA associated with viral infection, and induces the activation of NF-kappaB and the production of type I interferons. It may thus play a role in host defense against viruses. Use of alternative polyadenylation sites to generate different length transcripts has been noted for this gene. [provided by RefSeq, Jul 2008]
Function	Key component of innate and adaptive immunity. TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific to microorganisms. TLR3 is a nucleotide-sensing TLR which is activated by double-stranded RNA, a sign of viral infection. Acts via the adapter TRIF/TICAM1, leading to NF-kappa-B activation, IRF3 nuclear translocation, cytokine secretion and the inflammatory response. [UniProt]
Highlight	Related products: <u>TLR3 antibodies;</u> <u>TLR3 ELISA Kits;</u> <u>Anti-Rat IgG secondary antibodies;</u> Related news: <u>CyTOF-candidate Antibodies</u>
Calculated Mw	104 kDa (Mouse)
PTM	Heavily N-glycosylated, except on that part of the surface of the ectodomain that is involved in ligand binding. TLR3 signaling requires a proteolytic cleavage mediated by cathepsins CTSB and CTSH, the cleavage occurs between amino acids 252 and 346. The cleaved form of TLR3 is the predominant form found in endosomes.



#### ARG22601 anti-TLR3 antibody [11F8] FACS image

Flow Cytometry: Mouse spleen cells stained with Rat anti Mouse CD8 alpha (APC) and (A) ARG22601 anti-TLR3 antibody [11F8] or (B) Rat IgG control. Detection stained with Goat anti Rat IgG (Dylight®488) was performed following permeabilisation of the cells prior to incubation with ARG22601 anti-TLR3 antibody [11F8].