ARG65482
anti-TNF alpha antibody [MAb11]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [MAb11] recognizes TNF alpha
Tested Reactivity	Hu, NHuPrm, Pig
Tested Application	CyTOF®-candidate, ELISA, FACS, ICC/IF, IHC-Fr, Neut
Specificity	The clone MAb11 recognizes human 17-26 kDa cytokine TNF alpha (tumor necrosis factor alpha).
Host	Mouse
Clonality	Monoclonal
Clone	MAb11
Isotype	IgG1
Target Name	TNF alpha
Species	Human
Immunogen	Recombinant human TNF alpha.
Conjugation	Un-conjugated
Alternate Names	Tumor necrosis factor ligand superfamily member 2; DIF; Cachectin; ICD2; ICD1; N-terminal fragment; TNF-a; TNFA; TNFSF2; TNF-alpha; Tumor necrosis factor; NTF

Application Instructions

Application table

Application	Dilution
CyTOF®-candidate	Assay-dependent
ELISA	Assay-dependent
FACS	Assay-dependent
ICC/IF	Assay-dependent
IHC-Fr	Assay-dependent
Neut	Assay-dependent

Application Note

FACS: For intracellular staining.
IHC-Fr: Paraformaldehyde-fixed, saponin-treated frozen tissue sections.
Sandwich ELISA (Capture antibody - Detection antibody): ARG65481 - ARG65482 (in Biotinylated form)
Functional application: Neutralization.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified from hybridoma culture supernatant by protein-A affinity chromatography.

Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM 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

Database links	GeneID: 397086 Pig GeneID: 7124 Human Swiss-port # P01375 Human Swiss-port # P23563 Pig
Gene Symbol	TNF
Gene Full Name	tumor necrosis factor
Background	TNF-alpha is a cytokine produced by monocytes, macrophages, neutrophils, NK cells, CD4+ T cells and many transformed cells. It can be expressed as a 17 kDa free molecule, or as a 26 kDa membrane protein. TNF-alpha easily forms stable trimers, but also other multimeric complexes. In the immune system, it is an important regulator, which has cytolytic and cytostatic activity against a range of tumor cells, increases fibroblast proliferation and supports neutrophil chemotaxis and phagocytosis.
Function	Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation. Impairs regulatory T-cells (Treg) function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation. Upregulates the expression of protein phosphatase 1 (PP1), which dephosphorylates the key 'Ser-418' residue of FOXP3, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed:23396208). The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells. [UniProt]
Highlight	Related products: TNF alpha antibodies; TNF alpha ELISA Kits; TNF alpha Duos / Panels; TNF alpha recombinant proteins; Anti-Mouse IgG secondary antibodies; Related news: HMGB1 in inflammation Inflammatory Cytokines CyTOF-candidate Antibodies
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Immune System antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	26 kDa
PTM	The soluble form derives from the membrane form by proteolytic processing. The membrane-bound form is further proteolytically processed by SPPL2A or SPPL2B through regulated intramembrane proteolysis producing TNF intracellular domains (ICD1 and ICD2) released in the cytosol and TNF C-domain 1 and C-domain 2 secreted into the extracellular space. The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1. O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid.