# Anti-TIGIT [13E7]

Catalogue number: 153515 Sub-type: Images:

### Contributor

Inventor:
Institute:
Images:

### **Tool details**

#### **\*FOR RESEARCH USE ONLY**

Name: Anti-TIGIT [13E7]

ols.org Alternate name: T-cell immunoreceptor with Ig and ITIM domains, V-set and immunoglobulin domaincontaining protein 9, V-set and transmembrane domain-containing protein 3

#### **Class:** Monoclonal

**Conjugate:** Unconjugated

Description: Monoclonal antibody which detects TIGIT immunoglobulin protein. Background and Research Application TIGIT (also known as T cell immunoreceptor with Ig and ITIM domains) is a receptor on some percentage of T cells and Natural Killer Cells (NK). It is also identified as WUCAM and Vstm3. TIGIT binds with high affinity to the poliovirus receptor (PVR), also known as CD155, which causes increased secretion of IL-10 and decreased secretion of IL-12B and suppresses T cell activation by promoting the generation of mature immunoregulatory dendritic cells. Research has shown that TIGIT-Fc fusion protein could interact with PVR on dendritic cells and increase its IL-10 secretion level/decrease its IL-12 secretion level under LPS stimulation, and also inhibit T cell activation in vivo. TIGIT's inhibition of NK cytotoxicity can be blocked by antibodies against its interaction with PVR and the activity is directed through its ITIM domain. TIGIT and PD-1 has been shown to be over expressed on tumour antigen-specific (TA-specific) CD8+ T cells and CD8+ tumour infiltrating lymphocytes (TILs) from individuals with melanoma.

#### **Purpose:**

Parental cell: **Organism:** Tissue: Model: Gender: Isotype: IgG1 Reactivity: Human ; Mouse Selectivity:

Host: Mouse Immunogen: Q495A1 Immunogen UNIPROT ID: Q495A1 Sequence: Growth properties: Production details: Formulation: Recommended controls: Bacterial resistance: Selectable markers: Additional notes:

# **Target details**

Target: TIGIT

#### Target alternate names:

**Target background:** Monoclonal antibody which detects TIGIT immunoglobulin protein. Background and Research Application TIGIT (also known as T cell immunoreceptor with Ig and ITIM domains) is a receptor on some percentage of T cells and Natural Killer Cells (NK). It is also identified as WUCAM and Vstm3. TIGIT binds with high affinity to the poliovirus receptor (PVR), also known as CD155, which causes increased secretion of IL-10 and decreased secretion of IL-12B and suppresses T cell activation by promoting the generation of mature immunoregulatory dendritic cells. Research has shown that TIGIT-Fc fusion protein could interact with PVR on dendritic cells and increase its IL-10 secretion level/decrease its IL-12 secretion level under LPS stimulation, and also inhibit T cell activation in vivo. TIGIT's inhibition of NK cytotoxicity can be blocked by antibodies against its interaction with PVR and the activity is directed through its ITIM domain. TIGIT and PD-1 has been shown to be over expressed on tumour antigen-specific (TA-specific) CD8+ T cells and CD8+ tumour infiltrating lymphocytes (TILs) from individuals with melanoma.

#### Molecular weight:

Ic50:

## **Applications**

Application: ELISA ; IHC ; WB Application notes:

### Handling

Format: Liquid Concentration: Passage number: Growth medium: Temperature: Atmosphere: Volume: Storage medium: Storage buffer: Storage conditions: Shipping conditions: Shipping at 4° C

## **Related tools**

**Related tools:** 

# References

**References:** Brown et al. 2003. J Immunol. 170(3):1257-66. PMID: 12538684. ; Blockade of programmed death-1 ligands on dendritic cells enhances T cell activation and cytokine production.

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