

FITC-Labeled CD70 Protein, Human (HEK293, His)

Cat. No.:	HY-P78540
Synonyms:	CD70 molecule; CD70; TNFSF7; CD27 Ligand; CD27-L; CD27LG; Ki-24 antigen; TNFSF7G
Species:	Human
Source:	HEK293
Accession:	P32970 (L50-P193)
Gene ID:	970
Molecular Weight:	63-68 kDa

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	N/A.
Storage & Stability	Stored at -80°C for 1 year, protect from light. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	<p>CD70 (CD27 Ligand) belongs to the tumor necrosis factor (TNF) family, is the ligand for TNFRSF27/CD27^[1]. CD70 and CD27 are homotrimer type II and homodimer type I transmembrane glycoprotein, expressing on activated and resting T and B lymphocytes, respectively^{[3][4]}. As for a widely use of CD70 in animal disease model, the sequence of amino acids in human is very different from mouse (56.25%) and rat (55.79%).</p> <p>CD70 as one of the most frequently mutated genes in a series of diffuse large B cell lymphomas, especially acts in a crucial Epstein-Barr virus (EBV)-specific T cell immunity and more generally for the immune surveillance of B cells. CD70 inhibits EBV infection by restoring the expansion of EBV-specific T lymphocytes stimulated by the CD70-deficient EBV-infected B cells^[3].</p> <p>CD70 involves in activation of innate and adaptive immunity, expressing in the mature dendritic cells and being up-regulated upon the triggering of CD40 or Toll-like receptors^[2].</p> <p>CD70 induces proliferation of costimulated T cells, enhances the generation of cytolytic T cells, and contributes to T cell activation^[4].</p> <p>CD70 is also reported to play a role in regulating B-cell activation, cytotoxic function of natural killer cells, and immunoglobulin synthesis^[5]. targeting CD70 positive tumors with CAR-T cells induces a potent antitumor response^[6].</p>
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REFERENCES

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