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TCCR Antibody

Catalog # ASC10146

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q6UWB1
Other Accession	NP_004834, 4759328
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	69474
Conjugate	Unconjugated
Application Notes	TCCR antibody can be used for detection of TCCR by Western blot at 1 g/mL. An approximately 70 kDa band can be detected. Antibody can also be used for immunohistochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	9466
Other Names	TCCR Antibody: CRL1, TCCR, WSX1, IL27R, IL-27RA, zcytor1, CRL1, UNQ296/PRO336, Interleukin-27 receptor subunit alpha, Cytokine receptor WSX-1, IL-27 receptor subunit alpha, interleukin 27 receptor, alpha
Target/Specificity	IL27RA;
Reconstitution & Storage	TCCR antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TCCR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IL27RA (HGNC:17290)
Synonyms	CRL1, TCCR, WSX1
Function	Signal-transducing subunit for an heterodimeric cytokine composed of IL27/p28 and a soluble receptor EBI3 (PubMed:14764690, PubMed:36930708). Heterodimerizes with IL6ST/GP130 to mediate signal transduction in response to the heterodimeric cytokine IL27/p28-EBI3. This signaling system acts through STAT3 and STAT1 (PubMed:14764690, PubMed:38509369). Also acts as a signaling receptor as part of the humanin

	receptor complex; binding of MT-RNR2/humanin (HN) activates the intracellular JAK-STAT3 signaling pathway leading to neuroprotection (PubMed:19386761). Involved in the regulation of Th1-type immune responses (By similarity). Also appears to be involved in innate defense mechanisms (PubMed:14764690).
Cellular Location	Membrane; Single-pass type I membrane protein.
Tissue Location	Highly expressed in lymphoid tissues such as spleen, lymph nodes and peripheral blood leukocytes. Weakly expressed in other tissues examined including heart, brain, fetal and adult lung, liver, skeletal muscle, kidney, pancreas, prostate, testis, ovary, small intestine, kidney and colon. In the lymphoid system, higher level expression in CD4+ T-cell subsets than in CD8+ T-cell subsets. Also weaker expression in CD19+ B-cells and monocytes

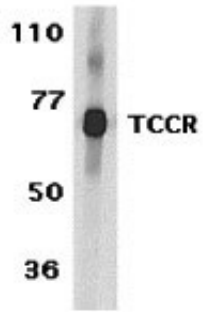
Background

TCCR Antibody: Upon antigen challenge, T-helper cells differentiate into two functional distinct subsets, Th1 and Th2. Th1 cells produce IL-2, IFN-gamma and lymphotoxin-beta that augment cell mediated immune response while Th2 cells secrete IL-4, IL-5, and IL-10 that enhance humoral immunity. The function of T-helper cells is regulated by cytokines. A novel cytokine receptor was recently identified and cloned. It is a new member in the type I cytokine receptor family and designated TCCR for T-cell cytokine receptor and WSX-1. TCCR deficient mice had impaired Th1 responses to protein antigen challenge, including decreased levels of IFN-gamma and Th1-dependent antibody IgG2a. TCCR is predominately expressed in thymus, spleen, lymph notes and peripheral blood leukocytes.

References

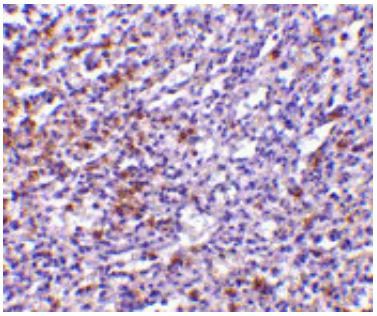
Chen Q, Ghilardi N, Wang H, Baker T, Xie MH, Gurney A, Grewal IS and de Sauvage FJ. Development of Th1-type immune responses requires the type I cytokine receptor TCCR Nature 2000;407(6806):916-920
Sprecher,C.A., Grant,F.J., Baumgartner,J.W., Presnell,S.R., Schrader,S.K., Yamagiwa,T., Whitmore,T.E., O'Hara,P.J. and Foster,D.F. Cloning and characterization of a novel class I cytokine receptor Biochem. Biophys. Res. Commun. 1998;246(1):82-90

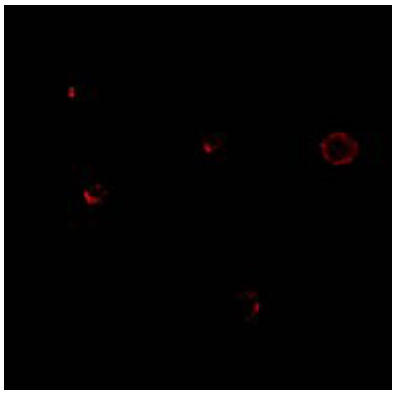
Images



Western blot analysis of TCCR expression in human spleen tissue lysates with TCCR antibody at 1 µg /ml.

Immunohistochemistry of TCCR in human spleen tissue with TCCR antibody at 10 µg/mL.





Immunofluorescence of TCCR in A549 cells with TCCR antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.