

TYK2 Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP20922c**Specification**

TYK2 Blocking Peptide (C-term) - Product Information

Primary Accession [P29597](#)
Other Accession [Q9R117](#)

TYK2 Blocking Peptide (C-term) - Additional Information

Gene ID 7297

Other Names

Non-receptor tyrosine-protein kinase TYK2, TYK2

Target/Specificity

The synthetic peptide sequence is selected from aa 887-902 of HUMAN TYK2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TYK2 Blocking Peptide (C-term) - Protein Information

Name TYK2

Function

Tyrosine kinase of the non-receptor type involved in numerous cytokines and interferons signaling, which regulates cell growth, development, cell migration, innate and adaptive immunity (PubMed:8232552, PubMed:7813427, PubMed:7657660, PubMed:10995743, PubMed:10542297). Plays both structural and catalytic roles in numerous interleukins and interferons (IFN-alpha/beta) signaling (PubMed:10542297). Associates with heterodimeric cytokine receptor complexes and activates STAT family members including STAT1, STAT3, STAT4 or STAT6 (PubMed:10542297, PubMed:7638186). The heterodimeric cytokine receptor complexes are composed of (1) a TYK2-associated receptor chain

(IFNAR1, IL12RB1, IL10RB or IL13RA1), and (2) a second receptor chain associated either with JAK1 or JAK2 (PubMed:7813427, PubMed:10542297, PubMed:7526154, PubMed:25762719). In response to cytokine-binding to receptors, phosphorylates and activates receptors (IFNAR1, IL12RB1, IL10RB or IL13RA1), creating docking sites for STAT members (PubMed:7526154, PubMed:7657660). In turn, recruited STATs are phosphorylated by TYK2 (or JAK1/JAK2 on the second receptor chain), form homo- and heterodimers, translocate to the nucleus, and regulate cytokine/growth factor responsive genes (PubMed:7657660, PubMed:10542297, PubMed:25762719). Negatively regulates STAT3 activity by promoting phosphorylation at a specific tyrosine that differs from the site used for signaling (PubMed:29162862).

Tissue Location

Observed in all cell lines analyzed. Expressed in a variety of lymphoid and non-lymphoid cell lines

TYK2 Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

TYK2 Blocking Peptide (C-term) - Images

TYK2 Blocking Peptide (C-term) - Background

Probably involved in intracellular signal transduction by being involved in the initiation of type I IFN signaling. Phosphorylates the interferon-alpha/beta receptor alpha chain.

TYK2 Blocking Peptide (C-term) - References

Firmbach-Kraft I., et al. Oncogene 5:1329-1336(1990).
Velazquez L., et al. Cell 70:313-322(1992).
Krolewski J.J., et al. Oncogene 5:277-282(1990).
Partanen J., et al. Proc. Natl. Acad. Sci. U.S.A. 87:8913-8917(1990).
Colamonici O., et al. Mol. Cell. Biol. 14:8133-8142(1994).