

Anti-IL-22R (CT) Polyclonal Antibody

CATALOG No.: PX221A SIZE: 100 μg

PX221B SIZE: 0.5 mg

BACKGROUND:

A novel cytokine, designated IL-TIF for IL-10 related T cell-derived inducible factor and IL-22, was recently identified (1-3). The receptor for IL-22 (IL-22R, also termed CRF2-9 and IL-TIF-R1 chain) is a new member of the class II cytokine receptor family (3,4). IL-22R forms a complex with IL-10 receptor β chain and mediates IL-22 signaling. IL-22 and its receptor activate JAK-STAT signaling pathway. IL22R is expressed in normal liver and kidney and their cell lines HepG2 and TK-10. A soluble form of IL-22 receptor, also termed IL-22 binding protein (IL-22BP) and IL-22 receptor-a 2 (IL-22RA2), was identified very recently (5-7). IL-22BP prevents binding of IL-22 to the functional cell surface IL-22R complex and neutralizes IL-22 activity. LPS induces IL-22 expression, which indicates the role of IL-22 in inflammatory response.

SOURCE:

Rabbit anti-IL-22R polyclonal antibody was raised against a synthetic peptide (DSLFRGLALTVQWES) corresponding to amino acids 560 to 574 of human IL-22R precursor (1).

APPLICATION:

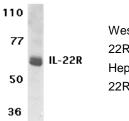
This antibody can be used for detection of IL-22R by Western blot at 0.5 to 1 μ g/ml. Human HepG2 cell lysate can be used as positive control and an approximately 62 kDa band can be detected.

STORAGE:

It is supplied as immunoaffinity purified IgG, 100 μ g in 200 μ l of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.

RELATED PRODUCTS:

Blocking peptide, $50 \mu g$ at $200 \mu g/ml$, is available for competition studies. Human HepG2 cell lysate, $100 \mu g$ at 2 mg/ml, is available for positive control.



Western blot analysis of IL-22R expression in human HepG2 cell lysate with anti-IL-22R (CT) at 1 µg /ml.

REFERENCES:

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- 3. Xie MH, Aggarwal S, Ho WH, et al. Interleukin (IL)-22, a novel human cytokine that signals through the interferon receptor-related proteins CRF2-4 and IL-22R. *J Biol Chem.* 2000;275(40):31335-9.
- 4. Kotenko SV, Izotova LS, Mirochnitchenko OV, et al. Identification of the functional interleukin-22 (IL-22) receptor complex: *J Biol Chem.* 2001;276(4):2725-32.
- 5. Kotenko SV, Izotova LS, Mirochnitchenko OV, et al. Identification, cloning, and characterization of a novel soluble receptor that binds IL-22 and neutralizes its activity. *J Immunol.* 2001;166(12):7096-103.
- 6. Dumoutier L, Lejeune D, Colau D, Renauld JC. Cloning and characterization of il-22 binding protein, a natural antagonist of il-10-related t cell-derived inducible factor/il-22. *J Immunol.* 2001;166(12):7090-5.
- 7. Xu W, Presnell SR, Parrish-Novak J, et al. A soluble class II cytokine receptor, IL-22RA2, is a naturally occurring IL-22 antagonist. *Proc Natl Acad Sci USA*. 2001 *in press*

CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.



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