

# IL-22R $\alpha$ 2 (M-15): sc-67636

## BACKGROUND

IL-22R $\alpha$ 2 (interleukin-22 receptor  $\alpha$ 2 chain), also known as IL-22 binding protein (IL-22BP), cytokine receptor family class II member 10 (CRF2-10) or CRF2-soluble 1 (CRF2-S1), is a soluble, non-signaling single chain receptor for IL-22. It is highly expressed in intestine and lymph nodes and is also found in spleen, kidney and liver. IL-22R $\alpha$ 2 has a cytokine-binding domain that contains two FnIII domains. Its affinity for IL-22 is four- to ten-fold higher than that of the membrane-bound IL-22 receptor, however it has a dissociation rate up to 20 times lower. By binding to IL-22, IL-22R $\alpha$ 2 prevents the binding to the IL-22 membrane-bound receptor and therefore inhibits IL-22 signaling. This suggests that IL-22R $\alpha$ 2 may be important in regulating inflammatory responses. In addition, IL-22R $\alpha$ 2 can be induced by lipopolysaccharide (LPS).

## REFERENCES

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- Wolk, K., et al. 2007. IL-22 induces lipopolysaccharide-binding protein in hepatocytes: a potential systemic role of IL-22 in Crohn's disease. *J. Immunol.* 178: 5973-5981.
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## CHROMOSOMAL LOCATION

Genetic locus: Il22ra2 (mouse) mapping to 10 A3.

## SOURCE

IL-22R $\alpha$ 2 (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IL-22R $\alpha$ 2 of mouse origin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67636 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

IL-22R $\alpha$ 2 (K-18) is recommended for detection of Interleukin-22 receptor  $\alpha$ 2 chain precursor of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-22R $\alpha$ 2 siRNA (m): sc-62496, IL-22R $\alpha$ 2 shRNA Plasmid (m): sc-62496-SH and IL-22R $\alpha$ 2 shRNA (m) Lentiviral Particles: sc-62496-V.

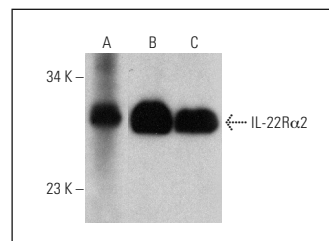
Molecular Weight of IL-22R $\alpha$ 2: 27 kDa.

Positive Controls: mouse heart extract: sc-2254, mouse breast extract: sc-395043 or mouse skin extract: sc-364251.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



IL-22R $\alpha$ 2 (M-15): sc-67636. Western blot analysis of IL-22R $\alpha$ 2 expression in mouse heart (A), mouse breast (B) and mouse skin (C) tissue extracts.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.