

Product datasheet for PP035B2

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II4 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, WB **Recommended Dilution:** ELISA:

To detect rat IL-4 by direct ELISA (using 100 ml/well antibody solution) this antibody can be used at a concentration of 0.15-0.30 µg/ml. Used in conjunction with compatible secondary

reagents, allows the detection of at least 0.2 ng/well of recombinant rat IL-4.

Western Blot:

To detect rat IL-4 by Western Blot analysis this antibody can be used at a concentration of 0.1-0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant rat IL-4 is 1.5-3.0 ng/lane, under either reducing or non-reducing conditions.

Reactivity: Rat

Host: Rabbit
Clonality: Polyclonal

Immunogen: Highly pure (>98%) recombinant rat IL-4 (rat Interleukin-4).

Specificity: This antibody recognises Rat IL-4. **Formulation:** PBS, pH 7.2 without preservatives.

Label: Biotin

State: Lyophilized purified Ig fraction.

Label: conjugated

Reconstitution Method: Restore in sterile PBS containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.

Purification: Affinity chromatography.

Conjugation: Biotin

Storage: Store the antibody prior to reconstitution at -20°C. Following reconstitution the antibody can

be stored at 2-8°C for one month or at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: One year from despatch.

Gene Name: interleukin 4

Database Link: Entrez Gene 287287 Rat

P20096





Background: IL4 is a pleiotropic cytokine produced by activated T cells, mast cells and basophils. It is a

ligand for Interleukin 4 receptor. The Interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. IL4 elicits many different biological responses, but has two dominant functions. The first is regulating differentiation of naïve CD4+ T cell to the Th2 type. Th2 cells produce IL4, IL5, IL10 and IL13, which tend to favor a humoral immune response while suppressing a cell mediated immune response controlled by Th1 cells. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. The second is regulating IgE and IgG1 production by B cells. Two alternatively spliced transcript

variants of this gene encoding distinct isoforms have been reported.

Synonyms: IL-4, BSF1, Lymphocyte stimulatory factor 1, Binetrakin, Pitrakinra

Note: Centrifuge vial prior to opening!