

Genorise® Bovine Interleukin 2 (IL-2) Polyclonal Antibody

Antigen-Affinity Purified Anti-Bovine interleukin 2 (IL-2) Rabbit Antibody Catalog Number: GR105064

Background

IL-2 is an interleukin, a type of cytokine immune system signaling molecule. IL-2 is a T cell stimulatory cytokine best known for inducing T cell proliferation, the production of immunoglobulins made by B cells and differentiation and proliferation of natural killer cells (1,2). IL-2 is also necessary during T cell development in the thymus for the maturation of a unique subset of T cells that are termed regulatory T cells (T-regs) (3, 4, 5). Conversely, IL-2 is involved in activation induced cell death (AICD) that is observed post T cell expansion by increasing levels of Fas on CD4+ T cells (6). IL-2 signals through a trimeric receptor complex consisting of IL-2 receptor alpha (CD25), IL-2 receptor beta (CD122) and a common gamma chain (γc). IL-2 R α binds exclusively to IL-2 with low affinity and increases binding affinity of the whole receptor complex including IL-2R β and γ c subunits. IL-2R β is also used by IL-2. The common γc is shared by all members of this family of cytokines including IL-4, IL-7, IL-9, IL-2, and IL-21. Binding of IL-2 activates the Ras/MAPK, JAK/Stat and PI 3-kinase/Akt signaling modules (1,2).

References

- 1. Ma, A. et al. (2006) Annu Rev Immunol 24, 657-79.
- 2. Gaffen, S.L. and Liu, K.D. (2004) Cytokine 28, 109-23.
- 3. Sakaguchi S, et al (1995). J. Immunol. 155 (3): 1151–64.
- 4. Fehérvari, Z. et al. (2006) Trends Immunol 27, 109-11.
- 5. Antony, P.A. et al. (2006) J Immunol 176, 5255-66.
- 6. Jaleco, S. et al. (2003) J Immunol 171, 61-8.

FOR LABORATORY RESEARCH USE ONLY NOT FOR USE IN HUMANS AND ANIMALS

Related products

- 1. GR238016 50 ml Reagent Reservoir, 100/case, 5 packs/case (pack of 20)
- 2. GR238004 Tissue Culture 96-well Microplate, individually packed, Case of 50
- 3. GR238019 1.5 ml Microcentrifuge tube with screw cap and free-standing, pack of 500
- 4. GR238007 125 ml leak-resistant HDPE bottle, colorless, pack of 24
- 5. GR238002 Microplate 12x8-Well Strip High Binding, Case of 50
- 6. GR238003 Microplate 12x8-Well Strip Medium Binding, Case of 50
- 7. GR238032 42592 Costar Stripwell Microplate 1 x 8 Flat Bottom, High Binding, Case of 100
- 8. GR238001 468667 Thermo Microplate 12x8-Well Strip Nunc Maxixorp F8, Case of 60
- 9. GR238031 96-well microplate sealer plastic, pack of 100



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Description

Species reactivity: Bovine

Specificity: Bovine interleukin 2 (IL-2).

Source: Polyclonal rabbit IgG

Purification: Antigen Affinity purified

Immunogen: E. coli derived recombinant Bovine interleukin 2 (IL-2), Ala21-Thr155

Accession # P05016.

Endotoxin Level: <0.10 EU per 1 µg of the antibody by the LAL method.

Formulation: lyophilized from a solution containing PBS and trehalose (100 µg/ml).

Application

Reconstitution: reconstitute at 0.2 mg/ml in sterile PBS

Recommended concentration: Western blot: >0.1 µg/ml

Immunocytochemistry: 5-15 µg/ml

ELISA: $0.2-0.8 \mu g/ml$

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months at -20°C.
- 1 month after reconstitution at 4 °C, from date of receipt.
- 6 months after reconstitution at -20°C to -70°C from date of receipt.

DECLARATION

THIS REAGENT IS FOR IN VITRO LABORATORY TESTING AND RESEARCH USE ONLY. DO NOT USE IT FOR CLINICAL DIAGNOSTICS. DO NOT USE OR INJECT IT IN HUMANS AND ANIMALS.

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