

Datasheet for ABIN7566395
IL1RN Protein (AA 27-178, Monomer) (Fc Tag)



[Go to Product page](#)

Overview

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| Quantity: | 50 µg |
| Target: | IL1RN |
| Protein Characteristics: | AA 27-178, Monomer |
| Origin: | Human, Mouse |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This IL1RN protein is labelled with Fc Tag. |

Product Details

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| Purpose: | Fc (LALA-PG)-KIH (human):IL-1Ra (mouse) (monomeric) (rec.) |
| Cross-Reactivity: | Mouse |
| Characteristics: | The extracellular domain of mouse IL-1Ra (aa 27-178) is fused to the C-terminus of the Fc (LALA-PG) Knob region of human IgG1. Fc (LALA-PG) Knobs:IL-1Ra (mouse) and Fc (LALA-PG) Holes form the Fc (LALA-PG)-KIH (human):IL-1Ra (mouse) (rec.) using the Knobs-into-Holes technology (see reference: J.B. Ridgway, et al., Protein Eng. 9, 617 (1996)). |
| Purity: | >95 % (SDS-PAGE) |
| Endotoxin Level: | <0.005 EU/µg purified protein (LAL test). |
| Grade: | Animal-Free |
| Biological Activity Comment: | It inhibits the binding of IL-1alpha and IL-1beta to the receptor IL-1R. The Fc contains the mutations LALA-PG that abolish the interaction between the Fc and FcγRs and therefore Fc undesirable effects. |

Target Details

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| Target: | IL1RN |
| Alternative Name: | IL-1Ra (IL1RN Products) |
| Background: | <p>Fc (LALA-PG)-KIH:Interleukin-1 Receptor Antagonist (mouse), IL-1Ra, Interleukin-1R Antagonist</p> <p>IL-1 is a group of inflammatory cytokines, represented by interleukin-1alpha and interleukin-1beta. IL-1Ra is a cytokine initially isolated from macrophages. It shares 19 % of homologous amino acids with IL1A and 30 % of homologous amino acids with IL1B. IL-1Ra is abundant in the proximal digestive tract reproductive system, skin, bone marrow, and liver. IL-1Ra is the principal endogenous IL-1 antagonist. IL-1Ra is upregulated during host acute or chronic inflammatory responses. IL-1Ra plays diverse roles in anti-inflammatory and anti-tumor processes, either inhibiting tumor angiogenesis and proliferation or suppressing tumor migration and metastasis. The protein Fc (LALA-PG)-KIH (human):IL-1Ra (mouse) (monomeric) (rec.) is produced by using two different vectors, one encoding for the Fc Knobs (LALA-PG) (human):IL-1Ra (mouse) sequence (synthesizing a protein of 50 kDa) and one encoding for the Fc Holes (LALA-PG) sequence (synthesizing a protein of 30 kDa). Both vectors transfected into HEK293 cells produce both Fc molecules (Knobs-into-Holes technology, J.B. Ridgway, et al., Protein Eng. 9, 617 (1996)) required for dimerization and for secretion of the final protein Fc (LALA-PG)-KIH (human):IL-1Ra (mouse) (monomeric) (rec.). This Fc-KIH format allows our mouse IL-1Ra protein to form a monomer that is the most active structure to bind and inhibit the IL-1 receptor. The LALA-PG mutations inhibit binding to FcγR and C1q while FcRn binding and Fc stability remain unaffected. InVivoKines™ are a new generation of recombinant fusion proteins for immunotherapeutic, preclinical and translational in vivo research</p> <p>InVivoKines™ are a new generation of recombinant fusion proteins for immunotherapeutic, preclinical and translational in vivo research</p> |
| Molecular Weight: | ~50kDa and 30 kDa (SDS-PAGE) |
| Pathways: | NF-kappaB Signaling , Hormone Transport , Cancer Immune Checkpoints |

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: 1 mg/mL after reconstitution.

Concentration: 1 mg/mL

Handling

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| Buffer: | Contains PBS |
| Handling Advice: | After reconstitution, prepare aliquots and store at -20 °C. Avoid freeze/thaw cycles. Centrifuge lyophilized vial before opening and reconstitution. PBS containing at least 0.1 % BSA should be used for further dilutions. |
| Storage: | 4 °C, -20 °C |
| Storage Comment: | Short Term Storage: +4°C Long Term Storage: -20°C Use & Stability: Stable for at least 6 months after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C. |