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32-8793: Recombinant Human IL-1 Receptor Type 1/IL-1R-1 (C-Fc)

Gene: IL1R1 Gene ID: 3554 Uniprot ID: P14778

Description

Source: Human cells. MW:62.9kD.

Recombinant Human Interleukin-1 receptor type 1/IL-1R-1 is produced by our Mammalian expression system and the target gene encoding Leu18-Thr332 is expressed fused with a Fc tag at the C-terminus. Interleukin 1 receptor, type I (IL-1R1) is an interleukin receptor that belongs to the interleukin-1 receptor family, IL-1R1 is an 80 kDa transmembrane protein that is expressed predominantly by T cells, fibroblasts, and endothelial cells. This gene along with IL1R2, IL1RL2, and IL1RL1 form a cytokine receptor gene cluster in a region mapped to chromosome 2q12. IL-1R1 is an important mediator involved in many cytokine induced immune and inflammatory responses. It binds to interleukin-1 associates with the corecptor IL1RAP to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B, MAPK and other pathways. The signaling involves the recruitment of adapter molecules such as TOLLIP, MYD88, and IRAK1 or IRAK2 via the respective TIR domains of the receptor/coreceptor subunits. It also binds ligands with comparable affinity and binding of antagonist IL1RN prevents association with IL1RAP to form a signaling complex. An IL1 receptor accessory protein that can heterodimerize with the Type I receptor in the presence of IL1a or IL1 beta but not IL1ra, was identified. Recombinant IL1 soluble receptor Type I is a potent antagonist of IL1 action.

Product Info

Amount: $10 \mu g / 50 \mu g$

Content: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Storage condition: Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted

samples are stable at -20°C for 3 months.

Amino Acid: LEADKCKEREEKIILVSSANEIDVRPCPLNPNEHKGTITWYKDDSKTPVSTEQASRIHQHKEKLWFVPAKVEDSG

> HYYCVVRNSSYCLRIKISAKFVENEPNLCYNAQAIFKQKLPVAGDGGLVCPYMEFFKNENNELPKLQWYKDCKP LLLDNIHFSGVKDRLIVMNVAEKHRGNYTCHASYTYLGKQYPITRVIEFITLEENKPTRPVIVSPANETMEVDLGS QIQLICNVTGQLSDIAYWKWNGSVIDEDDPVLGEDYYSVENPANKRRSTLITVLNISEIESRFYKHPFTCFAKNTH GIDAAYIQLIYPVTIEGRDMDPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP EVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQ

QGNVFSCSVMHEALHNHYTQKSLSLSPGK

Application Note

Endotoxin: Less than 0.1 ng/ $\tilde{A} \square \hat{A} \mu g$ (1 IEU/ $\tilde{A} \square \hat{A} \mu g$) as determined by LAL test.