FITC-Labeled IL-1RAcP/IL-1 R3 Protein, Human (HEK293, His)

Cat. No.:	HY-P701305
Synonyms:	IL1RAP; IL-1RAcP; C3orf13; IL1R3
Species:	Human
Source:	HEK293
Accession:	Q9NPH3 (S21-E359)
Gene ID:	3556
Molecular Weight:	50-60 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from 0.22 μm filtered solution of PBS, pH7.4 with trehalose as protectant.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 1 year, protect from light. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	IL-1RAcP/IL-1 R3 protein functions as a coreceptor within the IL-36 and IL-1 signaling systems. It acts as a coreceptor with IL1R1 to form a high-affinity interleukin-1 receptor complex, mediating interleukin-1-dependent activation of NF-kappa-B and other pathways. The formation of this complex involves the association of IL1RAcP/IL-1 R3 with IL1R1 bound to IL1B. The signaling cascade includes the recruitment of adapter molecules such as TOLLIP, MYD88, and IRAK1 or IRAK2 via the TIR domains of the receptor/coreceptor subunits. Notably, IL1RAcP/IL-1 R3 does not independently bind to interleukin-1; rather, the binding of IL1RN to IL1R1 prevents the association of IL1RAcP/IL-1 R3 with IL1R1, thereby inhibiting complex formation and downstream signaling. The cellular response is further modulated through a non-signaling interaction with the membrane IL1R2 decoy receptor. Additionally, IL1RAcP/IL-1 R3 serves as a coreceptor for IL1RL1 in the IL-33 signaling system and can bidirectionally induce pre- and postsynaptic differentiation of neurons by trans-synaptically binding to PTPRD. Furthermore, it may play a role in IL1B-mediated costimulation of IFNG production from T-helper 1 (Th1) cells and enhances the ability of secreted IL1R1 to inhibit IL-33 signaling. Moreover, the protein forms a complex with secreted ligand-bound IL1R2, increasing the affinity of secreted IL1R2 for IL1B, which represents a dominant mechanism for the neutralization of IL1B by secreted/soluble receptors.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA