

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-1 RI in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-1 RI, rhIL-1 R3, recombinant mouse (rm) IL-18 R, rmlIL-1 RII, recombinant rat IL-1 R6, or rhIL-1 R8 is observed.
Source	Monoclonal Hamster IgG Clone # JAMA147
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human cervical epithelial carcinoma cell line HeLa-derived recombinant mouse IL-1 RI
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Neutralization Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Two distinct types of receptors that bind the pleiotropic cytokines IL-1 α and IL-1 β have been described. The IL-1 receptor Type I is an 80 kDa transmembrane protein that is expressed predominantly by T cells, fibroblasts, and endothelial cells. IL-1 receptor Type II is a 68 kDa transmembrane protein found on B lymphocytes, neutrophils, monocytes, large granular leukocytes, and endothelial cells. Both receptors are members of the immunoglobulin superfamily and show approximately 28% sequence identity in their extracellular domains. The two receptor types do not heterodimerize into a receptor complex. Mouse IL-1 RI shares 63% amino acid sequence homology with human IL-1 RI in their extracellular domains.

An IL-1 receptor accessory protein (1) that can heterodimerize with the Type I receptor in the presence of IL-1 α or IL-1 β , but not IL-1 α , was identified. This Type I receptor complex appears to mediate all the known IL-1 biological responses. The receptor Type II has a short cytoplasmic domain and does not transduce IL-1 signals. In addition to the membrane-bound form of IL-1 RII, a naturally-occurring soluble form of IL-1 RII has been described. It has been suggested that the Type II receptor, either as the membrane-bound or as the soluble form, serves as a decoy for IL-1 and inhibits IL-1 action by blocking the binding of IL-1 to the signaling Type I receptor complex. Recombinant IL-1 soluble receptor Type I is a potent antagonist of IL-1 action.

PRODUCT SPECIFIC NOTICES

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