Technical Data Sheet

PE Mouse Anti-Human CD218a (IL-18Rα)

Product Information

Material Number: 564675
Alternate Name: IL-1Rrp; IL1RRP; IL18RA; IL-18Rα; IL-18R-1; IL18R1
Size: 50 tests
Vol. per Test: 5 µl
Clone: H44
Immunogen: Human NK Cell Line
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Human
Workshop: VIII 80438
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The H44 monoclonal antibody specifically binds to CD218a, which is also known as Interleukin-18 receptor 1 (IL-18R1), IL-18 Receptor alpha (IL-18Rα) and IL1 Receptor-related protein (IL-1Rrp). CD218a is a type I transmembrane glycoprotein that associates with CD218b (IL-18Rβ) subunit to form the functional IL-18 Receptor Complex. Both subunits belong to the IL-1R family. The IL-18Rα chain is responsible for extracellular IL-18 binding whereas the IL-18Rβ subunit is involved in intracellular signaling through the NFκB pathway. CD218a is expressed on a variety of cells including T cells, NK cells, macrophages, granulocytes, keratinocytes, endothelial cells, and smooth muscle cells. CD218a expression is induced weakly in T cells by IL-12 treatment and moderately by phytohemagglutinin (PHA) stimulation. Costimulation with both IL-12 and PHA induces optimal CD218a expression on CD4+ T cells, CD8+ T cells, and CD56+ NK cells. The IL-18/IL-18R Complex plays important roles in adaptive immunity as well as innate immune responses and autoimmunity. H44 reportedly neutralized the biological activity of recombinant human IL-18 protein.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application
Flow cytometry Routinely Tested
### Suggested Companion Products

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<th>Name</th>
<th>Size</th>
<th>Clone</th>
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### Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to wwwbdbiosciencescom/pharmingen/protocols for technical protocols.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at wwwbdbiosciencescom/colors.

### References


Parnet P, Garka KE, Bonnert TP, Dower SK, Sims JE. IL-1Rrp is a novel receptor-like molecule similar to the type I interleukin-1 receptor and its homologues T1/ST2 and IL-1R AcP. *J Biol Chem*. 1996; 271(8):3967-3970. (Biology)
