Technical Data Sheet

Purified Rat Anti-Human CD124

Product Information

Material Number: 552472  
Alternate Name: IL-4 Receptor α chain  
Size: 0.5 mg  
Concentration: 0.5 mg/ml  
Clone: hIL4R-M10.1  
Isotype: Rat IgG2a, κ  
Reactivity: QC Testing: Human  
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The soluble human IL-4 receptor, also known as sCD124, is a 140-kDa multimeric membrane glycoprotein that binds IL-4 with high affinity. Although many cell types are able to produce soluble IL-4R at low levels, its production is significantly up-regulated in vitro by T cell activation and IL-4. Cytokines secreted by Th2 cells were found to significantly up-regulate soluble IL-4R production following antigenic stimulation. Studies have indicated that the production of sIL-4R in vivo is closely associated with the secretion of IL-4, and are consistent with reports indicating that sIL-4R are involved in the regulation of IL-4 activity during immune response.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4°C.

Application Notes

Application

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<th>Application</th>
<th>ELISA Capture</th>
<th>Routinely Tested</th>
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Recommended Assay Procedure:

ELISA Capture: Purified hIL4R-M10.1 anti-human IL-4R antibody (Cat. No. 552472) is useful as a capture antibody for a sandwich ELISA which measures human IL-4R protein levels. Purified hIL4R-M10.1 anti-human IL-4R antibody can be paired with biotinylated hIL4R-M.8.2.2 anti-human IL-4R (Cat. No. 552473) as the detection antibody, with recombinant soluble human IL-4R as the standard. This capture antibody should be titrated between 1 - 4 µg/ml to determine the optimal coating concentration for ELISA. To obtain linear standard curves, doubling dilutions of recombinant human IL-4R ranging from 2000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, see BD Pharmingen's Immune Function Handbook, at http://www.bdbiosciences.com/pdfs/manuals/02-8100055-21B.pdf.

Note: This ELISA antibody pair shows no cross-reactivity with the following recombinant human cytokines: IL-1RI, IL-1RII, IL-1α, IL-1β, IL-2, IL-2sR-α, IL-3, IL-4, IL-5, IL-6, IL-6R gp130, IL-7, IL-8, IL-10, IL-12 p40, IL-12 p70, IL-13, IL-15, TNF-α, TNF-β, sTNFRI, sTNFRII, GM-CSF, TGFB, IFN γ, CD40L, TRAIL, FasL.

Suggested Companion Products

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<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>552473</td>
<td>Biotin Rat Anti-Human CD124</td>
<td>0.5 mg</td>
<td>hIL4R-M8.2.2</td>
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Product Notices

2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. 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.

References

