Technical Data Sheet
Purified Mouse Anti-Human CD154

Product Information

Material Number: 552559
Alternate Name: CD40L
Size: 0.5 mg
Concentration: 0.5 mg/ml
Clone: hCD40L-M90.1
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description
Clone hCD40L-M90.1 reacts with CD40 ligand (CD40L), a 39 kDa type II membrane glycoprotein expressed on activated T cells. CD40-CD40L interaction plays a very important role in T cell-dependent B-cell proliferation, differentiation, and memory cell formation. In addition, blocking of CD40-CD40L interaction has been demonstrated with soluble CD40, resulting in the inhibition of immunoglobulin isotype switching. It has been reported that patients with X-linked hyper-IgM syndrome have defective expression of functional CD40L due to a defective gene that encodes CD40L.

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>Routinely Tested</th>
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<td>ELISA Capture</td>
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Recommended Assay Procedure:
ELISA Capture: The purified hCD40L-M90.1 antibody (Cat. No. 552559) is useful as a capture antibody for a sandwich ELISA for measuring human CD40L protein levels. Purified hCD40L-M90.1 antibody can be paired with biotinylated hCD40L-M91.2, anti-human CD40L (Cat. No. 552560) as the detecting antibody. Purified hCD40L-M90.1 antibody should be titrated 1 - 4 μg/ml to determine the optimal concentration for ELISA capture. To obtain linear standard curves, doubling dilutions of recombinant human soluble CD40L, ranging from 2000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology see the ELISA chapter in the Immune Function Handbook.

Note: This ELISA antibody pair shows no cross-reactivity with the following recombinant human proteins: CD40, IL-1Ra, IL-1RI, IL-1RII, IL-1α, IL-1β, IL-2, IL-3, IL-4, sIL-4R, IL-5, IL-6, IL-6R, IL-7, IL-8, IL-10, IL-12p40, IL-12p70, IL-13, IL-15, TNF-α, TNF-β, sTNFRI, sTNFRII, IFNγ, TRAIL, MCSF, TGFβ, Trx

Suggested Companion Products

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
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<tr>
<td>552560</td>
<td>Biotin Mouse Anti-Human CD154</td>
<td>0.5 mg</td>
<td>hCD40L-M91</td>
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Product Notices
1. 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.
4. This product is sold under US Patent No. 5,961,974

References

552559 Rev. 2