Technical Data Sheet

Purified Hamster Anti-Mouse gp49 Receptor

Product Information

Material Number: 552420
Size: 0.1 mg
Concentration: 0.5 mg/ml
Clone: H1.1
Immunogen: gp49B-Fc fusion protein composed of extracellular domain of gp49B
Isotype: Armenian Hamster IgG3, k
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The H1.1 antibody reacts with gp49B, a structural homolog of the human Killer Inhibitory Receptors (KIR), and with the truncated related molecule gp49A. The gp49 receptors are expressed on myeloid cells of adult bone marrow, spleen, and liver and fetal liver. They are not found on resting lymphoid cells, but their expression is upregulated on activated NK cells. gp49B is a member of the Ig superfamily containing two cytoplasmic ITIM (Immunoreceptor Tyrosine-based Inhibitory Motif) domains, while gp49A has no ITIM. Although its ligand is unknown, it is established that cross-linking of gp49B can suppress cell activation events.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4°C.

Application Notes

Routinely Tested

Application | ELISA | Immunoprecipitation | Induction
--- | --- | --- | ---
Flow cytometry | Reported | Reported | Reported

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>554025</td>
<td>Biotin Mouse Anti-Armenian and Syrian Hamster IgG</td>
<td>0.5 mg</td>
<td>G192-1</td>
</tr>
<tr>
<td>554067</td>
<td>APC Streptavidin</td>
<td>0.1 mg</td>
<td>(none)</td>
</tr>
<tr>
<td>554061</td>
<td>PE Streptavidin</td>
<td>0.5 mg</td>
<td>(none)</td>
</tr>
<tr>
<td>551386</td>
<td>Purified Hamster IgG3, k Isotype Control</td>
<td>0.5 mg</td>
<td>E36-239</td>
</tr>
</tbody>
</table>

Recommended Assay Procedure:

For optimal staining, we recommend the use of biotinylated anti-hamster IgG mAb G192-1 (Cat. no. 554025) as the second-step antibody, followed by a bright third-step reagent such as Streptavidin-APC (Cat. no. 554067) or Streptavidin-PE (Cat. no. 554061).

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/pharmingen/hamster_chart_11x17.pdf.
4. 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.

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References

Katz HR, Vivier E, Castells MC, McCormick MJ, Chambers JM, Austen KF. Mouse mast cell gp49B1 contains two immunoreceptor tyrosine-based inhibition motifs and suppresses mast cell activation when coligated with the high-affinity Fc receptor for IgE. *Proc Natl Acad Sci U S A*. 1996; 93(20):10809-10814. (Biology)

McCormick MJ, Castells MC, Austen KF, Katz HR. The gp49A gene has extensive sequence conservation with the gp49B gene and provides gp49A protein, a unique member of a large family of activating and inhibitory receptors of the immunoglobulin superfamily. *Immunogenetics*. 1999; 50(5-6):286-294. (Biology)

