

DESCRIPTION

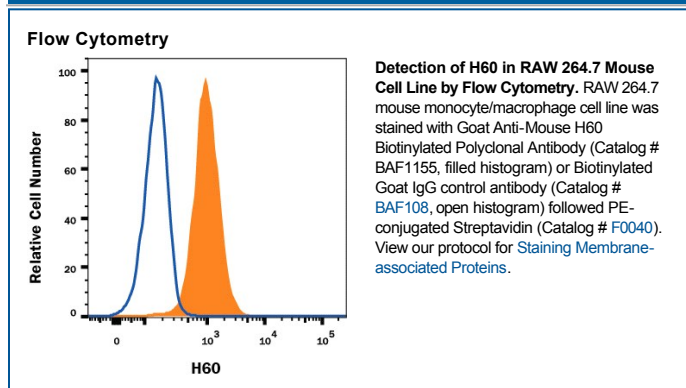
Species Reactivity	Mouse
Specificity	Detects mouse H60 in ELISAs and Western blots. In sandwich immunoassays, less than 0.2% cross-reactivity with recombinant mouse (rm) MULT-1, rmRae-1 α , rmRae-1 β , rmRae-1 δ , rmRae-1 ϵ , and rmRae-1 γ is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse H60 Asp30-Gln212 Accession # Q3TDZ7
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.

	Recommended Concentration	Sample
Western Blot	0.1 μ g/mL	Recombinant Mouse H60 Fc Chimera (Catalog # 1155-H6)
Flow Cytometry	0.25 μ g/10 ⁶ cells	See Below
Mouse H60 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Mouse H60 Antibody (Catalog # MAB1155)
ELISA Detection	0.1-0.4 Not Assigned	Mouse H60 Biotinylated Antibody (Catalog # BAF1155)
Standard		Recombinant Mouse H60 Fc Chimera (Catalog # 1155-H6)

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

H60 was originally described as an immunodominant histocompatibility antigen that is expressed in BALB mice but not in B6 mice. More recently it was reported to function as a ligand for mouse NKG2D, an activating receptor found on NK cells, on some T cell subsets, and on stimulated macrophages. H60 shares approximately 25 percent amino acid identity with the Rae-1 family, a small group of proteins that also function as ligands for mouse NKG2D. H60 and the Rae-1 proteins are distantly related to MHC class I proteins, but they possess only the $\alpha 1$ and $\alpha 2$ Ig-like domains, and have no capacity to bind peptide or interact with $\beta 2$ -microglobulin. The genes encoding these proteins are not found within the Major Histocompatibility Complex on mouse chromosome 17, but rather map to mouse chromosome 10. Unlike the GPI-linked Rae-1 proteins, H60 appears to be anchored to the membrane via a hydrophobic transmembrane segment. H60 transcripts were found in embryonic tissue, in spleen, and in some transformed cell lines. Transcripts were also observed in mouse skin cells after exposure to carcinogens. Binding of H60 to NKG2D results in the activation of cytolytic activity and/or cytokine production by the NKG2D-expressing effector cells. Ectopic expression of H60 on mouse tumor cell lines resulted in the *in vivo* rejection of the tumors (1-6).

References:

1. Malarkannan, S. *et al.* (1998) *J. Immunol.* **161**:3501.
2. Diefenbach, A. *et al.* (2000) *Nature Immunol.* **1**:119.
3. Cerwenka, A. *et al.* (2000) *Immunity* **12**:721.
4. Cerwenka, A. *et al.* (2001) *Proc. Natl. Acad. Sci. USA* **98**:11521.
5. Diefenbach, A. *et al.* (2001) *Nature* **413**:165.
6. NKG2D and its Ligands, www.RnDSystems.com.