

# Ly-49H Monoclonal Antibody (3D10), eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	3D10
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_906245

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	10 Publications
Immunoprecipitation (IP)	Assay-Dependent	-
Neutralization (Neu)	-	1 Publication
Functional Assay (FN)	Assay-Dependent	3 Publications

## Product Specific Information

**Description:** The monoclonal antibody 3D10 recognizes Ly-49H, a member of the C-type lectin Ly-49 multigene family of receptors found on natural killer cells. Ly-49H, like Ly-49D, lacks the characteristic ITIM (immunoreceptor tyrosine-based inhibitory motif) and contains an arginine in the transmembrane domain implying these molecules act as activation receptors. Ly-49H is expressed in a subset of NK cells but not NKT (NK1.1CD3+) cells. Natural killer cells can express several Ly-49 proteins. It has been shown that there is preferential staining of Ly-49H with Ly-49D (cat 12-5783). Expression has been confirmed on C57BL/6 and NWN but not Balb/c or DBA/2 mice. Other mice strains have not been tested. No crossreactivity to Ly-49A, C, D or G2 has been observed. Addition of monoclonal antibody 3D10 to cell cultures induces lysis of target cells.

**Applications Reported:** This 3D10 antibody has been reported for use in flow cytometric analysis, and immunoprecipitation.

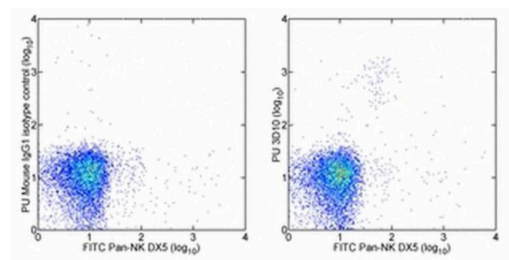
**Applications Tested:** This 3D10 antibody has been tested by flow cytometric analysis of C57BL/6 mouse splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

**Aggregation:** Less than 10%, as determined by HPLC.

**Filtration:** 0.2 µm post-manufacturing filtered.

Product Images For Ly-49H Monoclonal Antibody (3D10), eBioscience™



**Ly-49H Antibody (14-5886-82) in Flow**  
Staining of C57BL/6 splenocytes with Anti-Mouse CD49b (Integrin alpha 2) FITC (Product # 11-5971) and 0.125 µg of Mouse IgG1 K Isotype Control Purified (Product # 14-4714) (left) or 0.125 µg of Anti-Mouse Ly-49H Purified (right) followed by Anti-Mouse IgG Biotin and Streptavidin APC (Product # 17-4317). Cells in the lymphocyte gate were used for analysis.

14 References

Flow Cytometry (10)

<p><b>Cell reports</b></p> <p><b>Diverse CD8 T Cell Responses to Viral Infection Revealed by the Collaborative Cross.</b></p> <p>"14-5886 was used in Flow cytometry/Cell sorting to advance the utility of the Collaborative Cross (CC) as a tool to analyze the immune response to viral infection."</p> <p>Authors: Martin MD,Sompallae R,Winborn CS,Harty JT,Badovinac VP</p>	<p><b>Year</b> 2020</p> <p><b>Species</b> Mouse</p>
<p><b>Journal of immunology (Baltimore, Md. : 1950)</b></p> <p><b>NK Cell Maturation and Cytotoxicity Are Controlled by the Intramembrane Aspartyl Protease SPPL3.</b></p> <p>"14-5886 was used in Flow cytometry/Cell sorting to investigate the role of SPPL3 in murine NK cell biology."</p> <p>Authors: Hamblet CE,Makowski SL,Tritapoe JM,Pomerantz JL</p>	<p><b>Year</b> 2016</p> <p><b>Species</b> Mouse</p>

[View more Flow references on thermofisher.cn](#)

Neutralization (1)

<p><b>PLoS pathogens</b></p> <p><b>Natural killer cells attenuate cytomegalovirus-induced hearing loss in mice.</b></p> <p>"14-5886 was used in Functional assays to demonstrate that natural killer cell Ly49H receptor/m157 ligand interaction with cytomegalovirus infected cells attenuates hearing loss in mice."</p> <p>Authors: Almishaal AA,Mathur PD,Hillas E,Chen L,Zhang A,Yang J,Wang Y,Yokoyama WM,Firpo MA,Park AH</p>	<p><b>Year</b> 2017</p> <p><b>Species</b> Mouse</p>
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Functional Assay (3)

<p><b>PLoS pathogens</b></p> <p><b>Natural killer cells attenuate cytomegalovirus-induced hearing loss in mice.</b></p> <p>"14-5886 was used in Functional assays to demonstrate that natural killer cell Ly49H receptor/m157 ligand interaction with cytomegalovirus infected cells attenuates hearing loss in mice."</p> <p>Authors: Almishaal AA,Mathur PD,Hillas E,Chen L,Zhang A,Yang J,Wang Y,Yokoyama WM,Firpo MA,Park AH</p>	<p><b>Year</b> 2017</p> <p><b>Species</b> Mouse</p>
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