

# Product Datasheet

## MHC Class I Antibody (R1-21.2) - Chimeric - Azide and BSA Free

**NBP3-09017-0.2mg**

Unit Size: 0.2 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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### Publications: 2

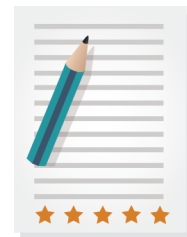
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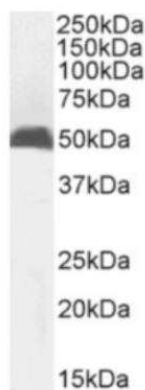
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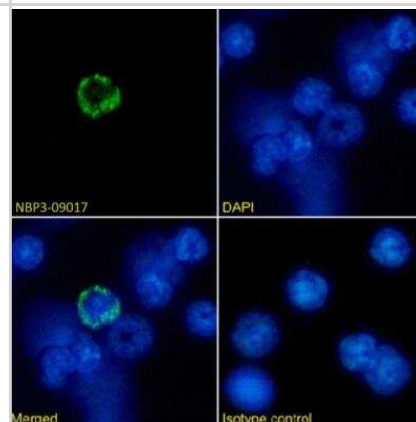
<b>Product Information</b>	
<b>Unit Size</b>	0.2 mg
<b>Concentration</b>	1 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	R1-21.2
<b>Preservative</b>	0.02% Proclin 300
<b>Isotype</b>	IgG Kappa
<b>Purity</b>	Protein A purified
<b>Buffer</b>	PBS
<b>Product Description</b>	
<b>Host</b>	Rabbit
<b>Gene ID</b>	3133
<b>Gene Symbol</b>	HLA-E
<b>Species</b>	Mouse
<b>Specificity/Sensitivity</b>	This antibody is specific for murine MHC class I, and binds to polymorphic H-2 determinants expressed on most haplotypes. This antibody is, therefore, able to bind all H-2 class I molecules, independent of the allele. This antibody inhibits the binding of most mouse anti-H-2 antibodies to H-2k cells.
<b>Immunogen</b>	This antibody was raised by immunising Lewis 1F rats with mouse CH-1 lymphoma cells. Spleen cells from immunised rats were fused with X-63Ag8-653 myeloma cells to generate hybridomas.
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Radioimmunoassay
<b>Recommended Dilutions</b>	Western Blot 1 ug/mL, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Radioimmunoassay
<b>Application Notes</b>	<p>This chimeric rabbit antibody was made using the variable domain sequences of the original format, for improved compatibility with existing reagents, assays and techniques.</p> <p>This antibody binds murine H-2 MHC class I molecules, and has been used in both structural and biochemical studies. It has been employed to assess MHC class I expression in frozen, acetone-fixed mouse brain sections by immunohistochemistry (Miralves et al, 2007), and to stain paraffin-embedded sections of mouse liver for H-2Kb expression (Limmer et al, 2005). It has also been used to precipitate mouse H-2Kk and H-2Dk class I molecules from detergent lysates of Ltk3.3/1 cells (Rada et al, 1990), and to stain H-2Kb and H-2Kk-expressing cells in FACS analysis (Bendelac, 1995). Cellular radioimmune assays have been used to confirm the binding of this antibody to spleen cells, and assess its strain specificity (Koch et al, 1983).</p>

## Images

Western Blot: MHC Class I Antibody (R1-21.2) - Chimeric [NBP3-09017] - Mouse thymus tissue lysate (35ug protein in RIPA buffer) was resolved on a SDS PAGE gel and blots were probed with NBP3-09017 at 1 ug/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence.



Immunocytochemistry/Immunofluorescence: MHC Class I Antibody (R1-21.2) - Chimeric [NBP3-09017] - Immunofluorescence analysis of paraformaldehyde fixed mouse splenocytes immobilized and stained with NBP3-09017 at 10 ug/ml followed by Alexa Fluor 488 secondary antibody (2 ug/ml), showing membrane staining in a subset of cells. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom NBP3-09017, DAPI, merged channels and an isotype control. The isotype control was stained with anti-Fluorescein antibody (NBP2-52638) followed by Alexa Fluor 488 secondary antibody.



## Publications

Morehead LC, Garg S, Wallis KF et al. Increased Response to Immune Checkpoint Inhibitors with Dietary Methionine Restriction in a Colorectal Cancer Model Cancers 2023-09-07 [PMID: 37760436] (IHC-P, Mouse)

Details:

Dilution: 1:50

Colvert CA, Hawkins KP, Semenikhina M et al. Endothelial Mechanical Stretch Regulates the Immunological Synapse Interface of Renal Endothelial Cells in a Sex-Dependent Manner Am J Physiol Renal Physiol. 2023-05-11 [PMID: 37167273] (WB, IHC-P, Mouse)



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### **Products Related to NBP3-09017-0.2mg**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
210-TA-005	TNF-alpha [Unconjugated]
H00003133-T01	MHC Class I 293T Cell Transient Overexpression Lysate

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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