abcam

ab174603

Anti-Mouse MHC Class I H 2Dd antibody [34-1-2S] - Low endotoxin, Azide free

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	pH: 7.2
Form	Liquid
Clonality	Monoclonal
Carrier free	Yes
Clone number	34-1-2S
Purification technique	Affinity purification Protein G
Specificity	ab174603 reacts with the mouse MHC class I, H-2Kd and H-2Dd. This cytotoxic antibody also cross-reacts with Kb, s, r, q, p.
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Expected

Species	Mouse
Dilution info	-

Notes	In a final volume of 100 uL. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

FuncS

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information H2-D1

Function	Involved in the presentation of foreign antigens to the immune system.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Endotoxin: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The Mouse MHC Class I H-2Dd also known as H-2Dd or simply 2Dd is a major histocompatibility complex (MHC) protein. It has a critical role in the immune system by presenting peptide antigens to CD8+ T cells. The protein has a mass of approximately 45 kilodaltons. H-2Dd is mainly expressed on the surface of nearly all nucleated cells in mice serving as an important component in immune recognition.
Biological function summary	The H-2Dd protein forms a complex with beta-2 microglobulin to create the MHC class I molecule. This complex plays an essential role in the identification and elimination of infected or transformed cells by the immune system. Specifically it binds to small peptide fragments derived from cytosolic proteins and displays them on the cell surface for surveillance by cytotoxic T lymphocytes.
Pathways	H-2Dd is involved in antigen processing and presentation pathways. It operates within the context of the adaptive immune response a pathway where it interacts with transporter associated with antigen processing (TAP). Another important pathway is the proteasome degradation pathway that generates peptide fragments presented by H-2Dd. The closely related MHC class I molecules like H-2Kk also participate in these processes ensuring proper immune system function.
Associated diseases and disorders	H-2Dd's role ties prominently to autoimmune diseases and transplant rejection. Variations in this protein can influence susceptibility to autoimmune conditions such as rheumatoid arthritis by altering the peptide presentation to T cells. H-2Dd is also connected to graft-versus-host disease during transplantation procedures where its mismatch can trigger immune rejection. In such cases interactions with other proteins like H-2Dd related peptides exacerbate the immune response necessitating careful consideration in clinical settings.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.