SYSY | HistoSure

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CD8a mouse specific

Cat.No. HS-361 003; Polyclonal rabbit antibody, 200 µl specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	200 µl specific antibody, lyophilized. Affinity purified with the immunogen. Azide was added before lyophilization. For **reconstitution** add 200 µl H_2O. Then aliquot and store at -20°C to -80°C until use. Antibodies should be stored at +4°C when still lyophilized. Do not freeze! For detailed information, see back of the data sheet.
Concentration	0.2 mg/ml
Applications	**WB**: 1 : 1000 (AP-staining) **IP**: not tested yet **ICC**: not tested yet **IHC**: 1 : 100 **IHC-P**: 1 : 100 **IHC-Fr**: 1 : 100
Immunogen	Synthetic peptide corresponding to AA 230 to 247 from mouse CD8a (UniProt Id: P01731)
Reactivity	Reacts with: mouse (P01731). Weaker signal: rat. No signal: human. Other species not tested yet.
Remarks	**IHC**: Antigen retrieval with citrate buffer pH 6 is required. **IHC-Fr**: Methanol fixation is recommended.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Background

CD 8 is a heterodimeric T-cell surface glycoprotein that consists of a **CD 8a** (alpha) and beta chain. It identifies cytotoxic/suppressor T-cells that interact with MHC class I bearing targets. CD 8 is thought to play a role in the process of T-cell mediated killing. CD 8 alpha chains binds to class I MHC molecules alpha-3 domains.

Selected References for HS-361 003

Common germline variants of the human APOE gene modulate melanoma progression and survival.
Ostendorf BN, Bilanovic J, Adaku N, Tafreshian KN, Tavora B, Vaughan RD, Tavazoie SF
Nature medicine (2020) : . . **IHC; tested species: mouse**

Immunosuppressive Myeloid Cells' Blockade in the Glioma Microenvironment Enhances the Efficacy of Immune-Stimulatory Gene Therapy.
Kamran N, Kadiyala P, Saxena M, Candolfi M, Li Y, Moreno-Ayala MA, Raja N, Shah D, Lowenstein PR, Castro MG
Molecular therapy : the journal of the American Society of Gene Therapy (2017) 251: 232-248. . **IHC-P**

Nanostructured lipid carriers based mRNA vaccine leads to a T cell-inflamed tumour microenvironment favourable for improving PD-1/PD-L1 blocking therapy and long-term immunity in a cold tumour model.
Fournier C, Mercey-Ressejac M, Derangère V, Al Kadi A, Rageot D, Charrat C, Leroy A, Vollaire J, Josserand V, Escudé M, Escaich S, et al.
EBioMedicine (2025) 112: 105543. . **IHC-P; tested species: mouse**

MS-20 enhances the gut microbiota-associated antitumor effects of anti-PD1 antibody.
Lee PJ, Hung CM, Yang AJ, Hou CY, Chou HW, Chang YC, Chu WC, Huang WY, Kuo WC, Yang CC, Lin KI, et al.
Gut microbes (2024) 161: 2380061. . **IHC; tested species: mouse**

Glutaminase inhibition impairs CD8 T cell activation in STK11-/Lkb1-deficient lung cancer.
Best SA, Gubser PM, Sethumadhavan S, Kersbergen A, Negrón Abril YL, Goldford J, Sellers K, Abeysekera W, Garnham AL, McDonald JA, Weeden CE, et al.
Cell metabolism (2022) : . . **IHC-P; tested species: mouse**

WEE1 inhibition enhances the antitumor immune response to PD-L1 blockade by the concomitant activation of STING and STAT1 pathways in SCLC.
Taniguchi H, Caeser R, Chavan SS, Zhan YA, Chow A, Manoj P, Uddin F, Kitai H, Qu R, Hayatt O, Shah NS, et al.
Cell reports (2022) 397: 110814. . **IHC-P; tested species: mouse**

Genomic control of inflammation in experimental atopic dermatitis.
Liu Y, Zienkiewicz J, Qiao H, Gibson-Corley KN, Boyd KL, Veach RA, Hawiger J
Scientific reports (2022) 121: 18891. . **IHC-P; tested species: mouse**

MEK inhibition overcomes chemoimmunotherapy resistance by inducing CXCL10 in cancer cells.
Limagne E, Nuttin L, Thibaudin M, Jacquin E, Aucagne R, Bon M, Revy S, Barnestein R, Ballot E, Truntzer C, Derangère V, et al.
Cancer cell (2022) 402: 136-152.e12. . **IHC-P; tested species: mouse**

Follicular helper-T cells restore CD8+-dependent antitumor immunity and anti-PD-L1/PD-1 efficacy.
Niogret J, Berger H, Rebe C, Mary R, Ballot E, Truntzer C, Thibaudin M, Derangère V, Hibos C, Hampe L, Rageot D, et al.
Journal for immunotherapy of cancer (2021) 96: . . **IHC-P; tested species: mouse**

Loss of Setd4 delays radiation-induced thymic lymphoma in mice.
Feng X, Lu H, Yue J, Schneider N, Liu J, Denzin LK, Chan CS, De S, Shen Z
DNA repair (2020) 86: 102754. . **IHC-P; tested species: mouse**

Glioma escape signature and clonal development under immune pressure.
Maire CL, Mohme M, Bockmayr M, Fita KD, Riecken K, Börnigen D, Alawi M, Failla AV, Kolbe K, Zapf S, Holz M, et al.
The Journal of clinical investigation (2020) : . . **IHC-P; tested species: mouse**

Therapeutic Targeting of Stat3 Using Lipopolyplex Nanoparticle-Formulated siRNA in a Syngeneic Orthotopic Mouse Glioma Model.
Linder B, Weirauch U, Ewe A, Uhmann A, Seifert V, Mittelbronn M, Harter PN, Aigner A, Kögel D
Cancers (2019) 113: . . **IHC-P; tested species: mouse**

Access the online factsheet including applicable protocols at https://sysy-histosure.com/product/HS-361003 or scan the QR-code.

FAQ - How should I store my antibody?

Shipping Conditions

- All our antibodies and control proteins / peptides are shipped lyophilized (vacuum freeze-dried) and are stable in this form without loss of quality at ambient temperatures for several weeks.

Storage of Sealed Vials after Delivery

- **Unlabeled** and **biotin-labeled antibodies** and **control proteins** should be stored at 4°C before reconstitution. **They must not be stored in the freezer when still lyophilized!** Temperatures below zero may cause loss of performance.
- **Fluorescence-labeled antibodies** should be reconstituted immediately upon receipt. Long term storage (several months) may lead to aggregation.
- **Control peptides** should be kept at -20°C before reconstitution.

Long Term Storage after Reconstitution (General Considerations)

- The storage freezer must not be of the frost-free variety ("no-frost freezer"). This cycle between freezing and thawing (to reduce frost-build-up), which is exactly what should be avoided. For the same reason, antibody vials should be placed in an area of the freezer that has minimal temperature fluctuations, for instance towards the back rather than on a door shelf.
- Aliquot the antibody and store frozen (-20°C to -80°C). Avoid very small aliquots (below 20 µl) and use the smallest storage vial or tube possible. The smaller the aliquot, the more the stock concentration is affected by evaporation and adsorption of the antibody to the surface of the storage vial or tube. Adsorption of the antibody to the surface leads to a substantial loss of activity.
- The addition of glycerol to a final concentration of 50% lowers the freezing point of your stock and keeps your antibody at -20°C in liquid state. This efficiently avoids freeze and thaw cycles.

Product Specific Hints for Storage

Control proteins / peptides

- Store at -20°C to -80°C.

Monoclonal Antibodies

- **Ascites** and **hybridoma supernatant** should be stored at -20°C up to -80°C. **Prolonged storage at 4°C is not recommended!** Unlike serum, ascites may contain proteases that will degrade the antibodies.
- **Purified IgG** should be stored at -20°C up to -80°C. Adding a carrier protein like BSA will increase long term stability. Many of our antibodies already contain carrier proteins. Please refer to the data-sheet for detailed information.

Polyclonal Antibodies

- **Crude antisera**: With anti-microbials added, they may be stored at 4°C. However, frozen storage (-20°C up to -80°C) is preferable.
- **Affinity purified antibodies**: Less robust than antisera. Storage at -20°C up to -80°C is recommended. Adding a carrier protein like BSA will increase long term stability. Most of our antibodies already contain carrier proteins. Please refer to the data-sheet for detailed information.

Fluorescence-labeled Antibodies

- Store as a liquid with 1 : 1 (v/v) glycerol at -20°C. Protect these antibodies from light exposure.

Avoid repeated freeze-thaw cycles for all antibodies!

FAQ - How should I reconstitute my antibody?

Reconstitution

- All our purified antibodies are lyophilized from PBS. To reconstitute the antibody in PBS, add the amount of deionized water given in the respective datasheet. If higher volumes are preferred, add water as mentioned above and then the desired amount of PBS and a stabilizing carrier protein (e.g. BSA) to a final concentration of 2%. Some of our antibodies already contain albumin. Take this into account when adding more carrier protein.
  For complete reconstitution, carefully remove the lid. After adding water, briefly vortex the solution. You can spin down the liquid by placing the vial into a 50 ml centrifugation tube filled with paper.
- If desired, add small amounts of azide or thimerosal to prevent microbial growth. This is especially recommended if you want to keep an aliquot a 4°C.
- After reconstitution of fluorescence-labeled antibodies, add 1 : 1 (v/v) glycerol to a final concentration of 50%. This lowers the freezing point of your stock and keeps your antibody in liquid state at -20°C.
- Glycerol may also be added to unlabeled primary antibodies. It is a suitable way to avoid freeze-thaw cycles.
- Please refer to our **tips and hints for subsequent storage** of reconstituted antibodies and control peptides and proteins.