abcam

Product datasheet

# Anti-Mast Cell Tryptase antibody [AA1] ab2378

35 Abreviews 126 References 8 图像

## 概述

| | |
|---|---|
| **产品名称** | Anti-Mast Cell Tryptase抗体[AA1] |
| **描述** | **小鼠单克隆抗体**[AA1] to Mast Cell Tryptase |
| **宿主** | Mouse |
| **经测试应用** | **适用于:** WB, IHC-P |
| **种属反应性** | **与反应:** Human<br>**预测可用于:** Mouse, Rat, Cat, Dog, Monkey |
| **免疫原** | Full length native protein (purified) corresponding to Human Mast Cell Tryptase. Human mast cell tryptase was purified from lung tissue by high salt extraction, ammonium sulphate precipitation, octyl Sepharose and heparin-agarose chromatography. (PMID 2253091) |
| **阳性对照** | WB: Human lung, tonsil and skin tissue lysate. IHC-P: Human skin tissue. |
| **常规说明** | This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**.<br>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.<br>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As |

## 性能

| | |
|---|---|
| **形式** | Liquid |
| **存放说明** | Shipped at 4°C. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. |
| **存储溶液** | pH: 7.40<br>Preservative: 0.02% Sodium azide |
| **纯度** | Tissue culture supernatant |
| **克隆** | 单克隆 |
| **克隆编号** | AA1 |
| **骨髓瘤** | unknown |

| | |
|---|---|
| **同种型** | IgG1 |
| **轻链类型** | unknown |

## 应用

**The Abpromise guarantee** Abpromise™承诺保证使用ab2378于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

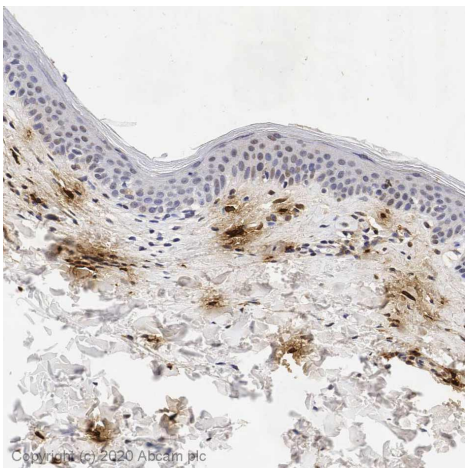
| 应用 | Ab评论 | 说明 |
|---|---|---|
| **WB** | (4) | 1/100 - 1/500. Detects a band of approximately 35-37 kDa (predicted molecular weight: 31 kDa).<br>We recommend using 3% milk as the blocking agent for Western blot. |
| **IHC-P** | (19) | 1/200000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

## 靶标

**相关性** Mast cells contain a number of preformed chemical mediators such as histamine, chymase, carboxypeptidase and proteolytic tryptase. Human Mast Cell Tryptase is considered to be an important marker of mast cell activation as well as an important mediator of inflammation.

**细胞定位** Secreted. Note: released from the secretory granules upon mast cell activation.

## 图片




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mast Cell Tryptase antibody [AA1] (ab2378)

IHC image of Mast Cell Tryptase staining in Human Normal Skin formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6) for 20 mins. The section was then incubated with ab2378, 1/200,000 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre


Western blot - Anti-Mast Cell Tryptase antibody [AA1] (ab2378)

**Lanes 1-3 :** Anti-Mast Cell Tryptase antibody [AA1] (ab2378) at 1/100 dilution
**Lanes 4-6 :** Anti-Mast Cell Tryptase antibody [AA1] (ab2378) at 1/500 dilution

**Lanes 1 & 4 :** Human lung normal tissue lysate - total protein (40 - 65 years)
**Lanes 2 & 5 :** Human tonsil normal tissue lysate - total protein
**Lanes 3 & 6 :** Human skin tissue lysate - total protein

Lysates/proteins at 20 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Mouse IgG H&L (HRP) preadsorbed at 1/5000 dilution

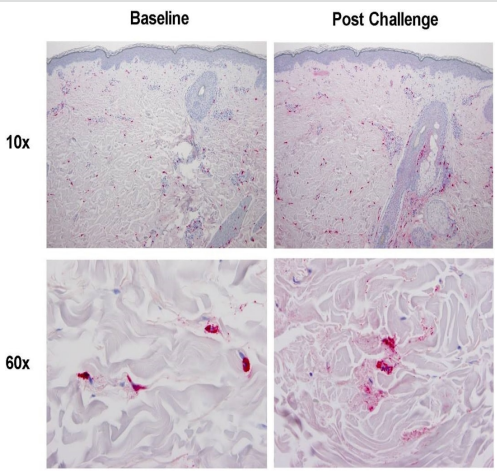
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 31 kDa

**Exposure time:** 2 minutes

Mast Cell Tryptase contains an 18-residue signal sequence and a 12-residue activation peptide. The protein also has two potential glycosylation sites (Swissprot data). These post-translational modifications might explain the banding pattern observed. Abcam used 5% milk in TBS-T as a blocking agent for this blot. We found that this blocking agent removed more non-specific bands than BSA.



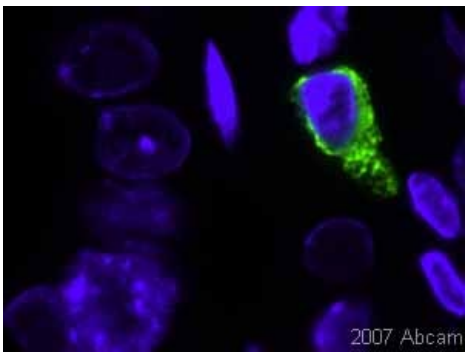

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mast Cell Tryptase antibody [AA1] (ab2378)

Meyer at al PLoS One. 2013;8(2):e56773. doi: 10.1371/journal.pone.0056773. Epub 2013 Feb 22. Fig 2. Reproduced under the Creative Commons license https://creativecommons.org/publicdomain/zero/1.0/

**Tryptase-stained skin biopsy.**

Skin biopsy in CUrt patient stained for tryptase (ab2378, red) at baseline at low (10×, upper panels) and high (60×, lower panels) magnification and at 15 minutes following cold stimulation time test.

Skin biopsies were obtained at baseline and 15 minutes after CSTT (5 min) on the challenge site, placed into 10% neutral buffered formalin, embedded in paraffin and cut into 5-µm-thick sections. Local anesthesia was performed just before biopsy and did not delay the timing of the biopsy. Slides for immunohistochemistry were deparaffinized and stained. ab2378 was diluted 1:100 and incubated for 2 hours. A biotinylated undiluted secondary antibody of Goat anti-Mouse SS Link, was incubated for 32 minutes, followed with enzyme conjugate, and Fast Red chromogen.

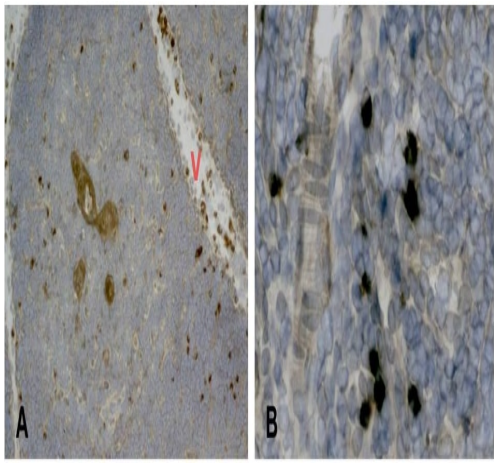



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mast Cell Tryptase antibody [AA1] (ab2378)

This image is courtesy of an Abreview submitted by Dr Tom Donndelinger

ab2378 staining formalin fixed paraffin-embedded human colon tissue sections cut at 1 micron.

The section was subjected to heat mediated antigen retrieval and permeabilized in Triton-X prior to blocking in 6% BSA for 2 hours at 24°C. The primary anitbody was diluted 1/250 and incubated with the sample for 16 hours at 5°C. The secondary antibody was **ab7064** (diluted 1/2000) and the slide was counterstained with DAPI.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mast Cell Tryptase antibody [AA1] (ab2378)

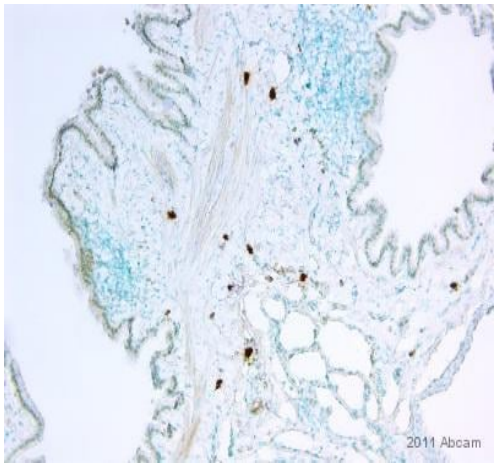
De Martin et al PLoS One. 2014 May 15;9(5):e97592. doi: 10.1371/journal.pone.0097592. eCollection 2014. Fig 2. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

**AM distribution in thymic mast cells in cryostat sections of human newborn thymic tissue.**

Sections were incubated with an antibody against tryptase (A, B) using ab2378 at a 1/100 dilution.

V: blood vessel.

Briefly, frozen sections (10 µm-thick) were cut with a cryostat at −20°C. Antigens were retrieved by heating the sections previously immersed in Bond Epitope Retrieval solution 1 at 100°C for 30 min. Sections were washed in phosphate buffered saline (PBS) and incubated with the primary antibody.

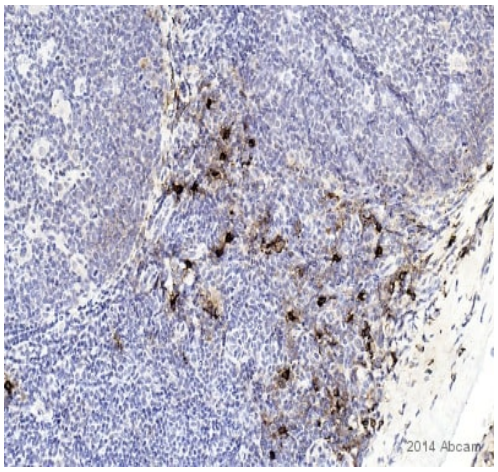



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mast Cell Tryptase antibody [AA1] (ab2378)

Image is courtesy of an AbReview submitted by Dr Fancois Daubeuf

ab2378 staining Mast Cell Tryptase in rat Lung tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections).

Tissue was fixed with formaldehyde and antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/200) for 16 hours at 4°C. A Biotin-conjugated Goat anti-mouse IgG polyclonal (1/500) was used as the secondary antibody.

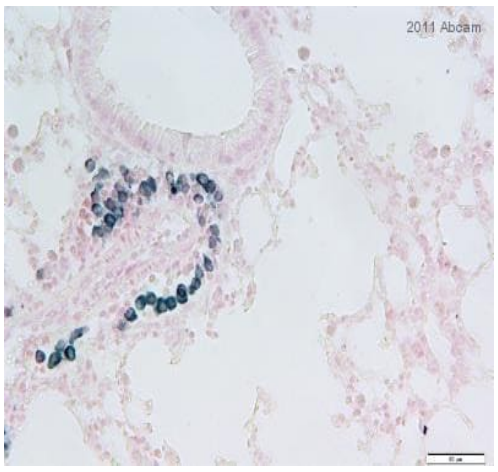



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mast Cell Tryptase antibody [AA1] (ab2378)

Image is courtesy of an AbReview submitted by Carl Hobbs

ab2378 staining Mast Cell Tryptase in human tonsil tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections).

Tissue was fixed with formaldehyde and blocked with 1% BSA for 10 minutes at 21°C; antigen retrieval was by heat mediation in a citric acid. Samples were incubated with primary antibody (1/7500 in TBS/BSA/azide) for 2 hours at 21°C. A Biotin-conjugated Goat anti-mouse IgG polyclonal (1/250) was used as the secondary antibody.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mast Cell Tryptase antibody [AA1] (ab2378)

Image courtesy of an AbReview submitted by Dr Francois Daubeuf

ab2378 staining Mast Cell Tryptase in mouse Lung (LPS inflammation) tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections).

Tissue was fixed with paraformaldehyde and blocked with 4% M.O.M Ig blocking for 1 hour at 20°C; antigen retrieval was by heat mediation in a citric acid. Samples were incubated with primary antibody (1/200 in blocking buffer) for 16 hours at 4°C. A Biotin-conjugated Rabbit anti-mouse IgG polyclonal (1/100) was used as the secondary antibody.

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