abcam

Product datasheet

Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker ab137869

重组 RabMAb

★★★★★ 9 Abreviews 46 References 12 图像

概述

产品名称	Anti-Tyrosine Hydroxylase抗体[EP1532Y] - Neuronal Marker
描述	兔单克隆抗体[EP1532Y] to Tyrosine Hydroxylase - Neuronal Marker
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, IHC-P, ICC/IF **不适用于:** IHC-Fr
种属反应性	**与反应:** Mouse, Rat, Human **预测可用于:** Pig
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	PC12 cell lysate; Rat glial tumor cell line; Rat cerebral cortex; Mouse cerebral cortex; SH-SY5Y.
常规说明	The human recommendation is based on the WB result. This antibody may not be suitable for IHC with human samples. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
纯度	Protein A purified

克隆	单克隆
克隆编号	EP1532Y
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab137869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
Flow Cyt (Intra)		1/50. For unpurified use at 1/1000. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ **(2)**	1/5000. Predicted molecular weight: 58 kDa. **For unpurified use at 1/10000 - 1/50000.**
IHC-P	★★★★★ **(3)**	1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
ICC/IF		1/100 - 1/250.

应用说明 Is unsuitable for IHC-Fr.

靶标

功能 Plays an important role in the physiology of adrenergic neurons.

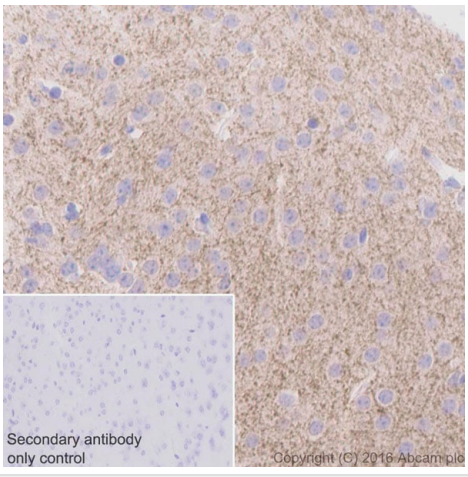
组织特异性 Mainly expressed in the brain and adrenal glands.

通路 Catecholamine biosynthesis; dopamine biosynthesis; dopamine from L-tyrosine: step 1/2.

疾病相关 Defects in TH are the cause of dystonia DOPA-responsive autosomal recessive (ARDRD) [MIM:605407]; also known as autosomal recessive Segawa syndrome. ARDRD is a form of DOPA-responsive dystonia presenting in infancy or early childhood. Dystonia is defined by the presence of sustained involuntary muscle contractions, often leading to abnormal postures. Some cases of ARDRD present with parkinsonian symptoms in infancy. Unlike all other forms of dystonia, it is an eminently treatable condition, due to a favorable response to L-DOPA. Note=May play a role in the pathogenesis of Parkinson disease (PD). A genome-wide copy number variation analysis has identified a 34 kilobase deletion over the TH gene in a PD patient but not in any controls.

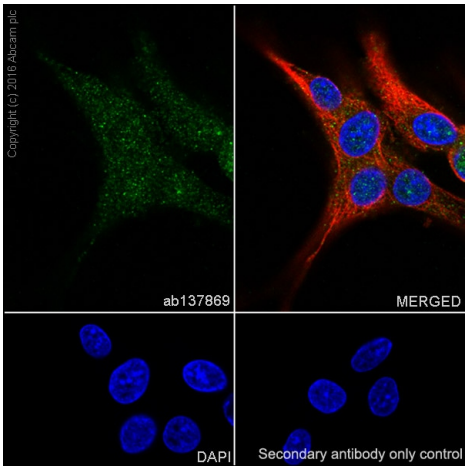
序列相似性 Belongs to the biopterin-dependent aromatic amino acid hydroxylase family.

图片



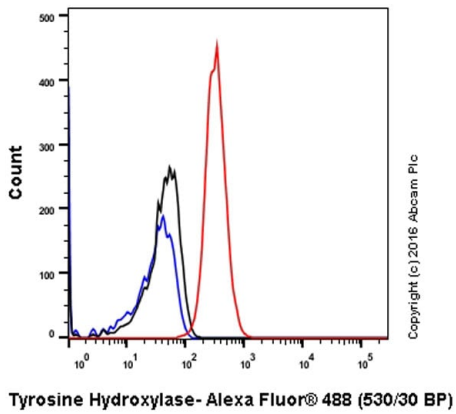
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse cerebral cortex tissue sections labeling Tyrosine Hydroxylase with Purified ab137869 at 1:500 dilution (1.1 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using citrate Buffer, PH6. Tissue was counterstained with Hematoxylin. **ab97051** Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1:500 dilution. PBS instead of the primary antibody was used as the negative control.



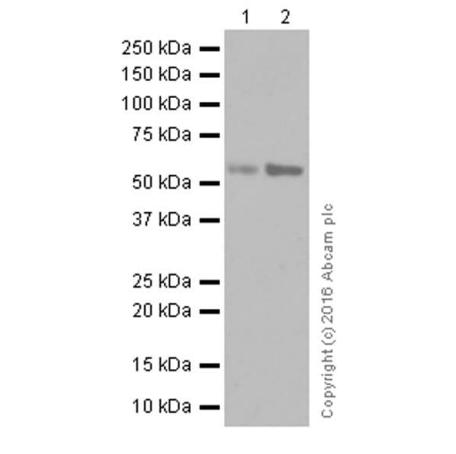
Immunocytochemistry/ Immunofluorescence - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Immunocytochemistry/ Immunofluorescence analysis of C6 (Rat glial tumor cell line) cells labeling Tyrosine Hydroxylase with Purified ab137869 at 1:100 dilution (5.6µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). **ab150077** Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Intracellular Flow Cytometry analysis of SH-SY5Y (Human neuroblastoma cell line from bone marrow) cells labeling Tyrosine Hydroxylase with purified ab137869 at 1/50 dilution (10 ug/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

All lanes : Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869) at 0.03 µg/ml (purified)

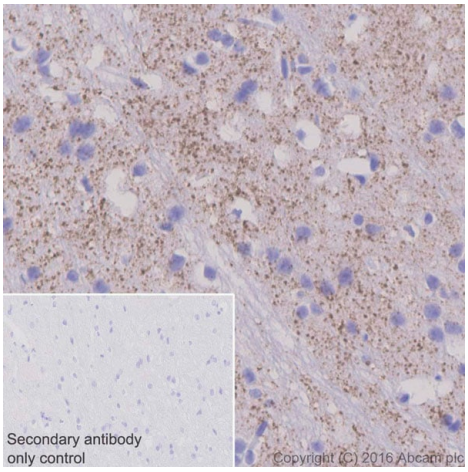
Lane 1 : Mouse brain lysate
Lane 2 : Rat brain lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

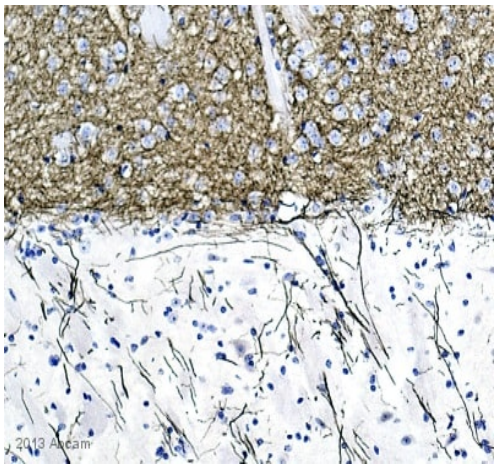
Predicted band size: 58 kDa
Observed band size: 58 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

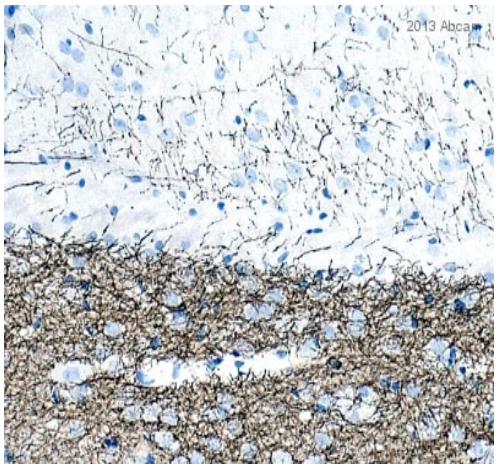
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat cerebral cortex tissue sections labeling Tyrosine Hydroxylase with Purified ab137869 at 1:500 dilution (1.1 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using citrate Buffer, PH6. Tissue was counterstained with Hematoxylin. **ab97051** Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1:500 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Image courtesy of Carl Hobbs, Kings College London, U.K.

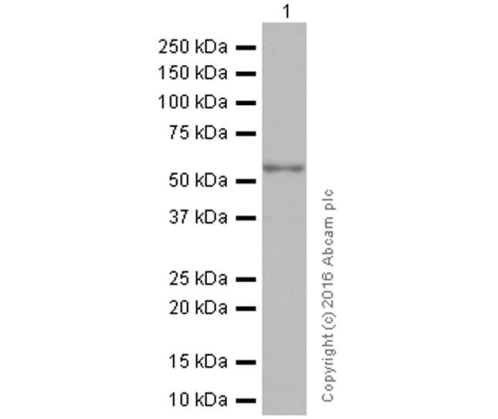
ab137869 staining Tyrosine Hydroxylase in mouse brain tissue sections by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue was fixed with formaldehyde and a heat mediated antigen retrieval step was performed using citrate buffer. Samples were then blocked with 1% B.S.A. for 10 minutes at 21ºC followed by incubation with the primary antibody for 2 hours at 1/800. A biotin-conjugated goat anti-rabbit polyclonal was used as secondary antibody at a 1/250 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Image courtesy of Carl Hobbs, Kings College London, U.K.

ab137869 staining Tyrosine Hydroxylase in rat brain tissue sections by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue was fixed with formaldehyde and a heat mediated antigen retrieval step was performed using citrate buffer. Samples were then blocked with 1% B.S.A. for 10 minutes at 21ºC followed by incubation with the primary antibody for 2 hours at 1/1000. A biotin-conjugated goat anti-rabbit polyclonal was used as secondary antibody at a 1/250 dilution.



Western blot - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869) at 0.1 µg/ml (purified) + Human adrenal gland lysate at 20 µg

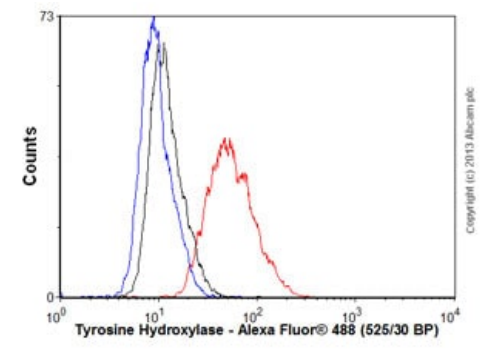
Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 58 kDa

Observed band size: 58 kDa

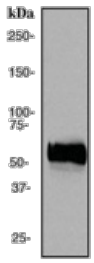
Blocking and diluting buffer : 5% NFDM/TBST



Flow Cytometry (Intracellular) - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Overlay histogram showing SHSY-5Y cells stained with ab137869 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab137869, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in

SHSY-5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



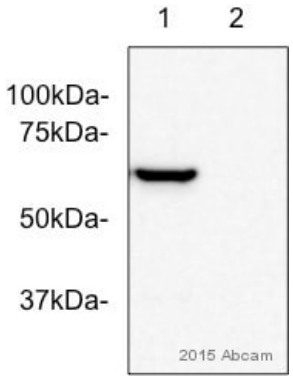
Western blot - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869) at 1/100000 dilution (unpurified) + PC12 cell lysate at 10 µg

Secondary

Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 58 kDa



Western blot - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

This image is courtesy of an Abreview submitted by Andre Antunes

All lanes : Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869) at 1/5000 dilution (unpurified)

Lane 1 : SH-SY5Y cell lysate - transduced with AAV vector expressing human TH
Lane 2 : SH-SY5Y cell lysate - non-infected

Lysates/proteins at 20000 cells per lane.

Secondary

All lanes : HRP-conjugated goat anti-rabbit IgG at 1/10000 dilution

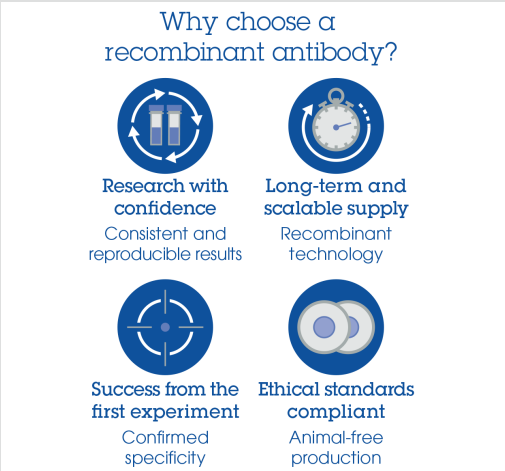
Developed using the ECL technique.

Performed under non-reducing conditions.

Predicted band size: 58 kDa
Observed band size: 58 kDa

Exposure time: 1 second

Blocked with 5% milk for 1 hour at 25°C.



Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

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