abcam

Product datasheet

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

リコンビナント RabMAb

★★★★★ **9 Abreviews**　**46 References**　画像数 12

製品の概要

製品名	Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker
製品の詳細	Rabbit monoclonal [EP1532Y] to Tyrosine Hydroxylase - Neuronal Marker
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), WB, IHC-P, ICC/IF **適用なし:** IHC-Fr
種交差性	**交差種:** Mouse, Rat, Human **交差が予測される動物種:** Pig ⚠
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	PC12 cell lysate; Rat glial tumor cell line; Rat cerebral cortex; Mouse cerebral cortex; SH-SY5Y.
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
精製度	Protein A purified

ポリ/モノ	モノクローナル
クローン名	EP1532Y
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee   **Abpromise保証は、次のテスト済みアプリケーションにおけるab137869の使用に適用されます**
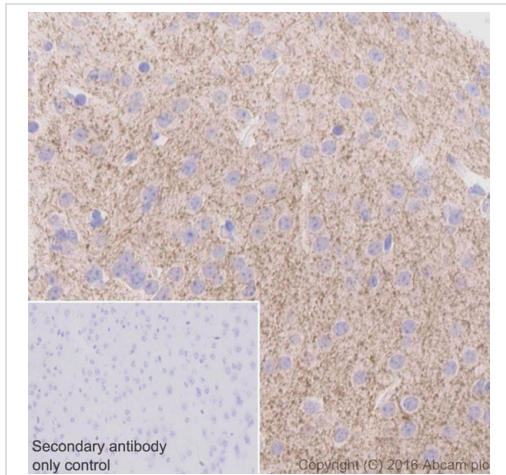
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

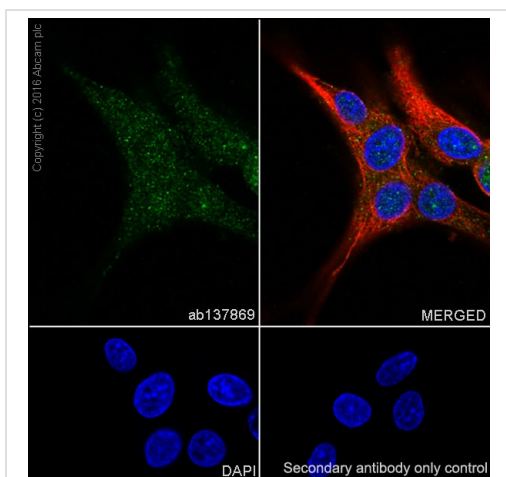|	
追加情報	Is unsuitable for IHC-Fr.

ターゲット情報

|	
機能	Plays an important role in the physiology of adrenergic neurons.
組織特異性	Mainly expressed in the brain and adrenal glands.
パスウェイ	Catecholamine biosynthesis; dopamine biosynthesis; dopamine from L-tyrosine: step 1/2.
関連疾患	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.
配列類似性	Belongs to the biopterin-dependent aromatic amino acid hydroxylase family.

画像

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.

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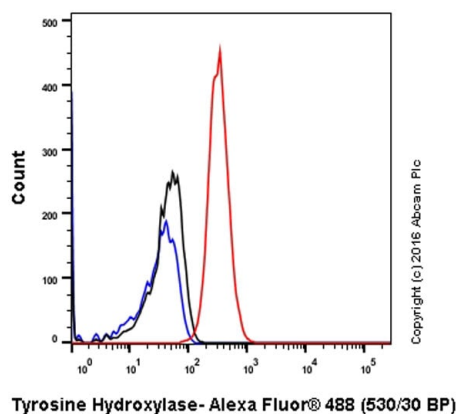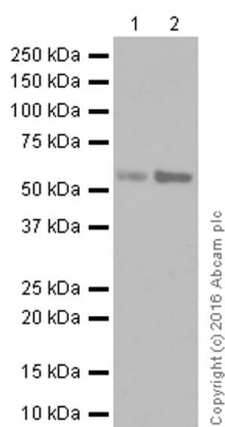
Immunocytochemistry/ Immunofluorescence - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

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).

Flow Cytometry (Intracellular) - 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
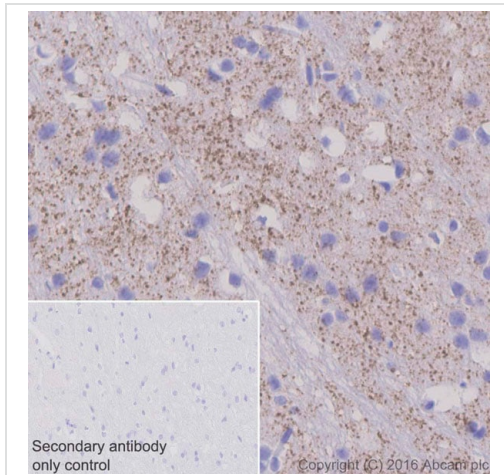**Lane 2 :** Rat brain lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution
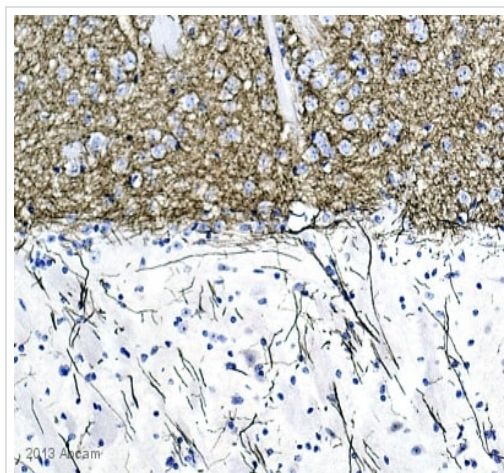
Predicted band size: 58 kDa
Observed band size: 58 kDa

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

Blocking and diluting buffer: 5% NFDM/TBST

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)


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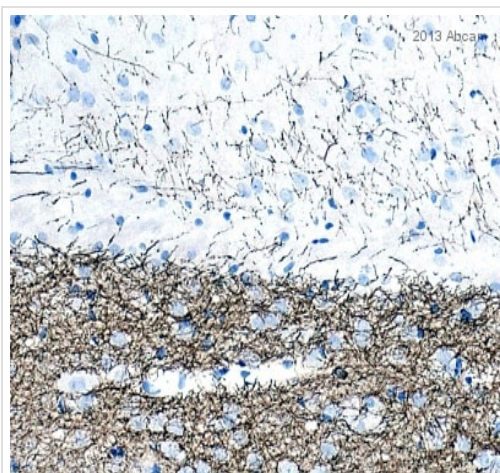
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

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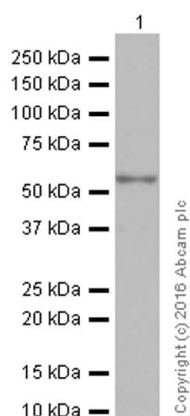
Western blot - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869) at 0.1 µg/ml (purified) + Human adrenal gland lysate at 20 µg
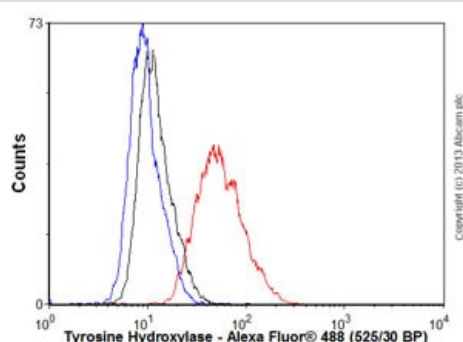
Secondary
Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

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.
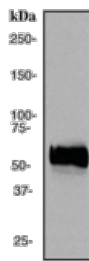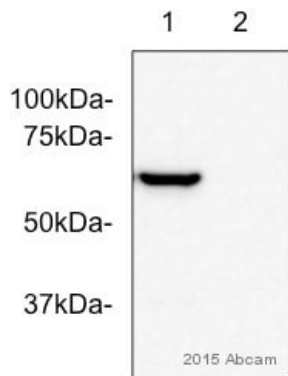

Western blot - Anti-Tyrosine Hydroxylase antibody [EP1532Y] - Neuronal Marker (ab137869)

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.

Why choose a recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

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

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