abcam

Product datasheet

Anti-Tyrosine Hydroxylase antibody [TH-100] ab129991

2 Abreviews 4 References 1 Image

Overview

Product name	Anti-Tyrosine Hydroxylase antibody [TH-100]
Description	Mouse monoclonal [TH-100] to Tyrosine Hydroxylase
Host species	Mouse
Tested applications	**Suitable for:** IHC-Fr, WB, IHC-P, Flow Cyt
Species reactivity	**Reacts with:** Rat, Rabbit, Human
Immunogen	Rat Tyrosine Hydroxylase.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.001% Sodium azide Constituents: 1.2% Sodium acetate, 0.2% BSA
Purity	Protein G purified
Purification notes	Purified by goat anti-mouse IgG affinity chromatography.
Clonality	Monoclonal
Clone number	TH-100
Isotype	IgG1

Applications

Our Abpromise guarantee covers the use of **ab129991** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

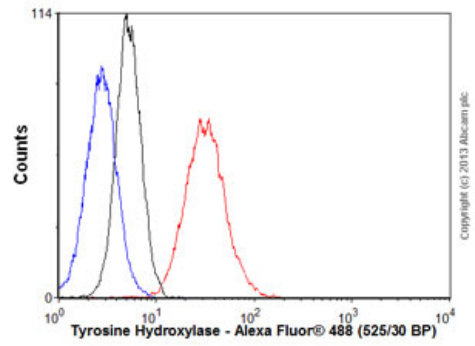
Application	Abreviews	Notes
IHC-Fr		Use a concentration of 0.5 - 1 µg/ml.
WB		Use a concentration of 0.25 - 0.5 µg/ml. Predicted molecular weight: 56 kDa.
IHC-P	★★★★★	Use a concentration of 0.5 - 1 µg/ml.

Application	Abreviews	Notes
Flow Cyt		Use 1µg for 10^6 cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function	Plays an important role in the physiology of adrenergic neurons.
Tissue specificity	Mainly expressed in the brain and adrenal glands.
Pathway	Catecholamine biosynthesis; dopamine biosynthesis; dopamine from L-tyrosine: step 1/2.
Involvement in disease	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.
Sequence similarities	Belongs to the biopterin-dependent aromatic amino acid hydroxylase family.

Images



Flow Cytometry - Anti-Tyrosine Hydroxylase antibody [TH-100] (ab129991)

Overlay histogram showing SH-SH5Y cells stained with ab129991 (red line). The cells were fixed with 80% methanol (5 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 (ab129991, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 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 SH-SY5Y cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors