abcam

Product datasheet

Anti-Dopamine beta Hydroxylase antibody [EPR20385] - BSA and Azide free ab223130

Recombinant RabMAb

6 Images

Overview

Product name	Anti-Dopamine beta Hydroxylase antibody [EPR20385] - BSA and Azide free
Description	Rabbit monoclonal [EPR20385] to Dopamine beta Hydroxylase - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: SH-SY5Y whole cell lysate; Mouse and rat adrenal gland lysates. IHC-P: Human adrenal gland and adrenal pheochromocytoma tissues; Mouse and rat adrenal gland tissues. IP: SH-SY5Y whole cell lysate.
General notes	ab223130 is the carrier-free version of **ab209487**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid

Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20385
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab223130 in the following tested applications.

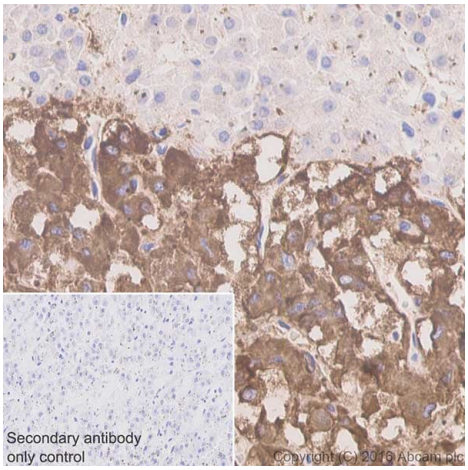
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 75 kDa (predicted molecular weight: 69 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Tris/EDTA Buffer, pH9 (**ab93684**)
IP		Use at an assay dependent concentration.

Target

Function	Conversion of dopamine to noradrenaline.
Pathway	Catecholamine biosynthesis; (R)-noradrenaline biosynthesis; (R)-noradrenaline from dopamine: step 1/1.
Involvement in disease	Defects in DBH are the cause of dopamine beta-hydroxylase deficiency (DBH deficiency) [MIM:223360]; also known as norepinephrine deficiency or noradrenaline deficiency. This disorder is characterized by profound deficits in autonomic and cardiovascular function, but apparently only subtle signs, if any, of central nervous system dysfunction.
Sequence similarities	Belongs to the copper type II ascorbate-dependent monooxygenase family. Contains 1 DOMON domain.
Cellular localization	Cytoplasmic vesicle > secretory vesicle lumen. Cytoplasmic vesicle > secretory vesicle > chromaffin granule lumen and Cytoplasmic vesicle > secretory vesicle membrane. Cytoplasmic vesicle > secretory vesicle > chromaffin granule membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dopamine beta Hydroxylase antibody [EPR20385] - BSA and Azide free (ab223130)

Immunohistochemical analysis of paraffin-embedded human adrenal gland tissue labeling Dopamine beta Hydroxylase with **ab209487** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

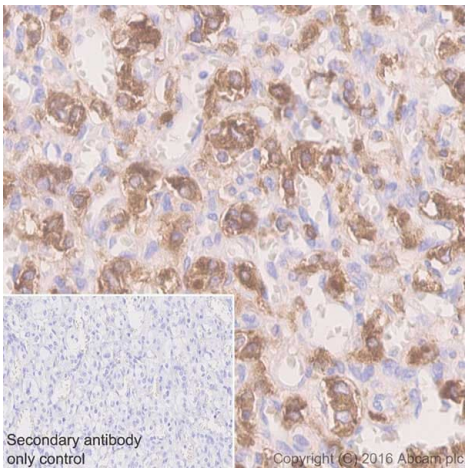
Strong cytoplasmic staining on chromaffin cells of human adrenal gland medulla, and negative on adrenal cortex (PMID: 17535872, PMID: 17699566).

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab209487**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dopamine beta Hydroxylase antibody [EPR20385] - BSA and Azide free (ab223130)

Immunohistochemical analysis of paraffin-embedded human adrenal pheochromocytoma tissue labeling Dopamine beta Hydroxylase with **ab209487** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

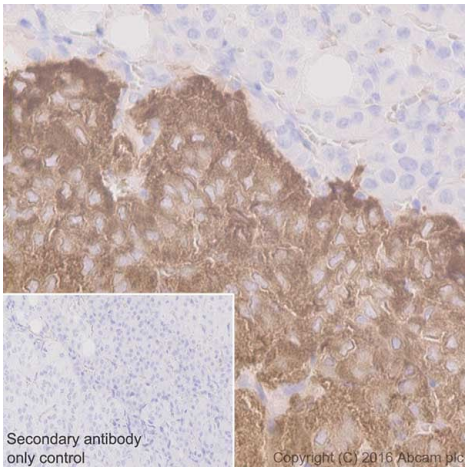
Cytoplasmic staining on tumor cells of human adrenal pheochromocytoma is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab209487**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dopamine beta Hydroxylase antibody [EPR20385] - BSA and Azide free (ab223130)

Immunohistochemical analysis of paraffin-embedded mouse adrenal gland tissue labeling Dopamine beta Hydroxylase with **ab209487** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

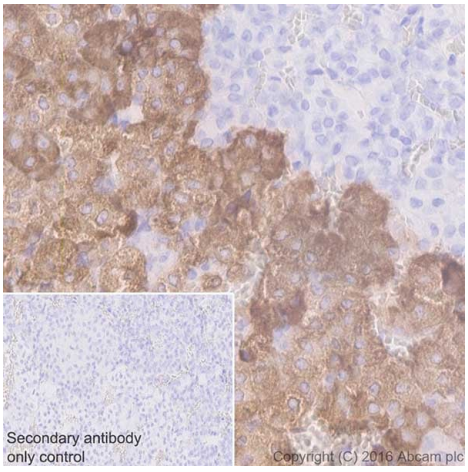
Cytoplasmic staining on chromaffin cells of mouse adrenal gland medulla, and negative on adrenal cortex (PMID: 17535872, PMID: 176995660).

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab209487**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dopamine beta Hydroxylase antibody [EPR20385] - BSA and Azide free (ab223130)

Immunohistochemical analysis of paraffin-embedded rat adrenal gland tissue labeling Dopamine beta Hydroxylase with **ab209487** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

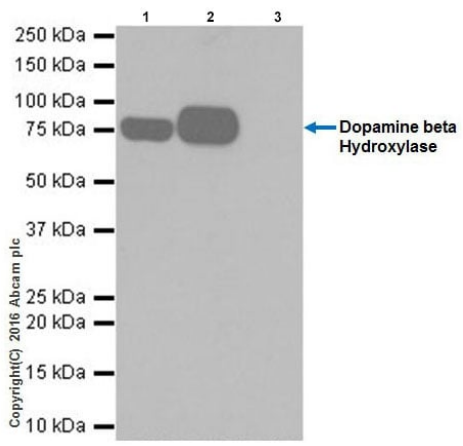
Cytoplasmic staining on chromaffin cells of rat adrenal gland medulla, and negative on adrenal cortex (PMID: 17535872, PMID: 176995660).

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab209487**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Dopamine beta Hydroxylase antibody [EPR20385] - BSA and Azide free (ab223130)

Dopamine beta Hydroxylase was immunoprecipitated from 0.35 mg of SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate with **ab209487** at 1/40 dilution.

Western blot was performed from the immunoprecipitate using **ab209487** at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: SH-SY5Y whole cell lysate, 10 µg (Input).

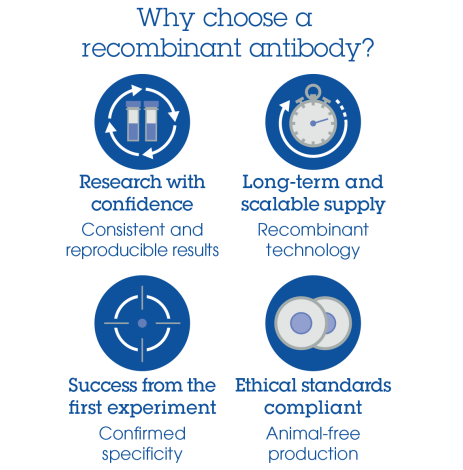
Lane 2: **ab209487** IP in SH-SY5Y whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab209487** in SH-SY5Y whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab209487**).



Anti-Dopamine beta Hydroxylase antibody [EPR20385] - BSA and Azide free (ab223130)

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