

## Product datasheet

# Anti-Dopamine beta Hydroxylase antibody [EPR20385] ab209487

Recombinant RabMAb

★★★★★ [5 Abreviews](#) [10 References](#) [8 Images](#)

### Overview

<b>Product name</b>	Anti-Dopamine beta Hydroxylase antibody [EPR20385]
<b>Description</b>	Rabbit monoclonal [EPR20385] to Dopamine beta Hydroxylase
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	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.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number                   EPR20385  
Isotype                            IgG

## Applications

**The Abpromise guarantee**           Our **Abpromise guarantee** covers the use of ab209487 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		1/1000. Detects a band of approximately 75 kDa (predicted molecular weight: 69 kDa).
IHC-P	★★★★★ (4)	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Tris/EDTA Buffer, pH9 ( <a href="#">ab93684</a> )
IP		1/40.

## Target

**Function**                                Conversion of dopamine to noradrenaline.

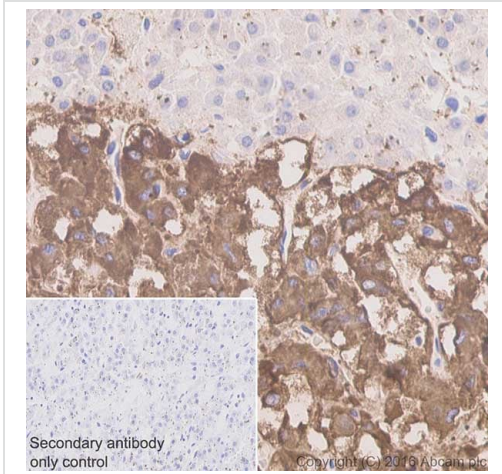
**Pathway**                                Catecholamine biosynthesis; (R)-noradrenaline biosynthesis; (R)-noradrenaline from dopamine: step 1/1.

**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] (ab209487)

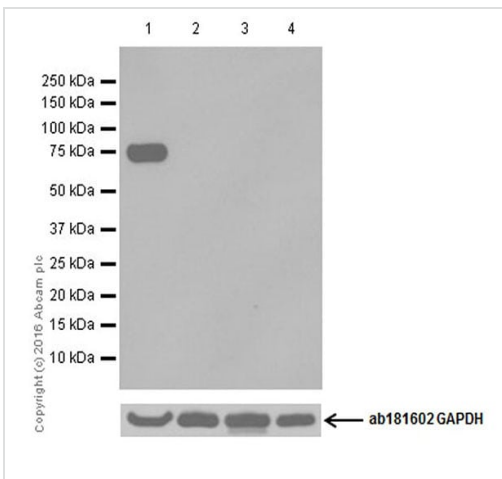
Immunohistochemical analysis of paraffin-embedded human adrenal gland tissue labeling Dopamine beta Hydroxylase with ab209487 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

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.

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



Western blot - Anti-Dopamine beta Hydroxylase antibody [EPR20385] (ab209487)

**All lanes** : Anti-Dopamine beta Hydroxylase antibody [EPR20385] (ab209487) at 1/1000 dilution

**Lane 1** : SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

**Lane 2** : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 3** : C6 (Rat glial tumor cell line) whole cell lysate

**Lane 4** : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

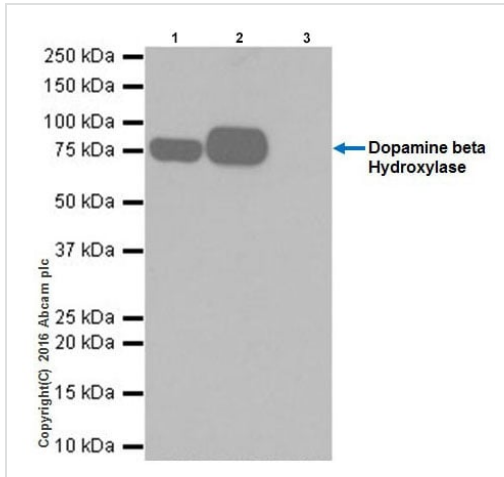
**Predicted band size:** 69 kDa

**Observed band size:** 75 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFD/MTBST.

**Negative controls:** HeLa (PMID: 7688735; PMID: 9763470, PMID:15585414, PMID: 10037744), C6 (PMID: 9763470, PMID:7798950, PMID: 10037744), HepG2 (PMID:7798950, PMID:11943777, PMID:15585414).



Immunoprecipitation - Anti-Dopamine beta Hydroxylase antibody [EPR20385] (ab209487)

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.

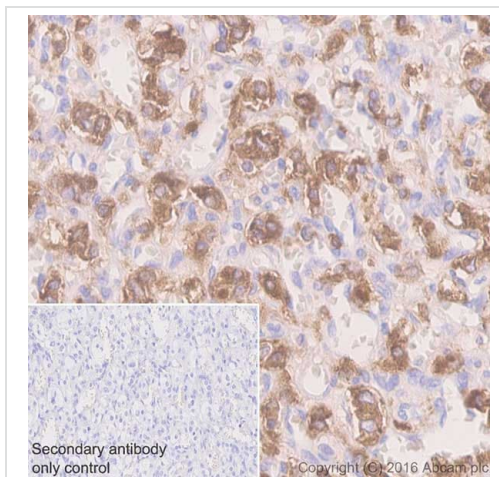
Lane 1: SH-SY5Y whole cell lysate, 10 µg (Input).

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% NFD/MTBST.

Exposure time: 3 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dopamine beta Hydroxylase antibody [EPR20385] (ab209487)

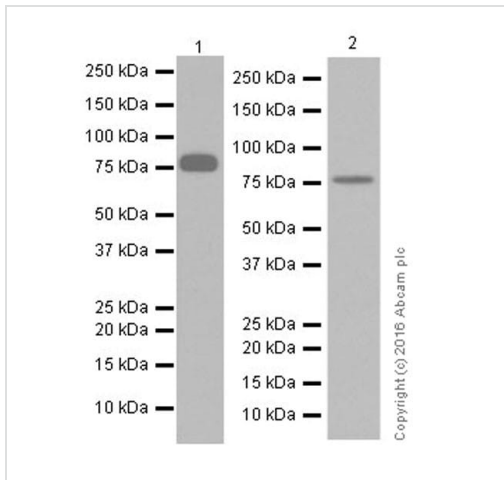
Immunohistochemical analysis of paraffin-embedded human adrenal pheochromocytoma tissue labeling Dopamine beta Hydroxylase with ab209487 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

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.

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



Western blot - Anti-Dopamine beta Hydroxylase antibody [EPR20385] (ab209487)

**All lanes :** Anti-Dopamine beta Hydroxylase antibody [EPR20385] (ab209487) at 1/1000 dilution

**Lane 1 :** Mouse adrenal gland lysate

**Lane 2 :** Rat adrenal gland lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

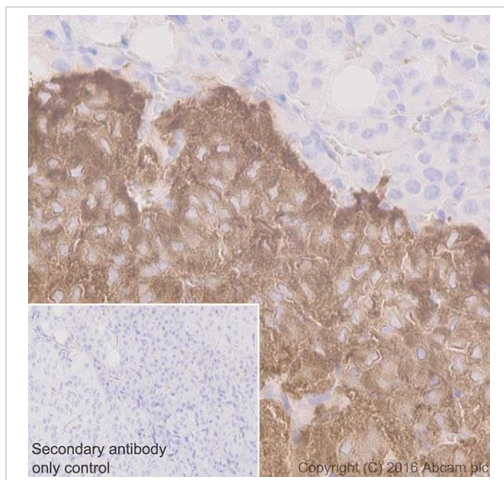
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 69 kDa

**Observed band size:** 75 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1: 3 minutes; Lane 2: 1 second.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dopamine beta Hydroxylase antibody [EPR20385] (ab209487)

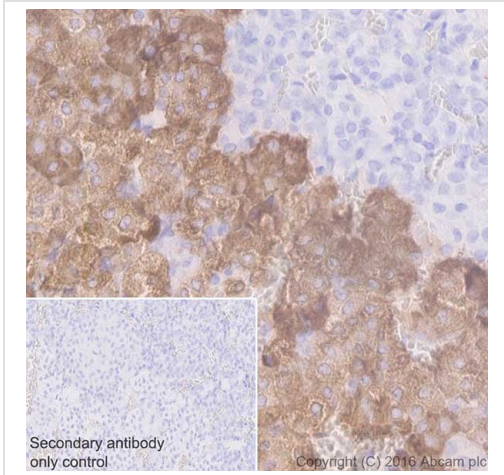
Immunohistochemical analysis of paraffin-embedded mouse adrenal gland tissue labeling Dopamine beta Hydroxylase with ab209487 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

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.

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] (ab209487)

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.

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

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-Dopamine beta Hydroxylase antibody [EPR20385] (ab209487)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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