ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Dopamine beta-Hydroxylase (DBH) Antibodies

Cat # DBH12-A	Rabbit Anti-Human DBH peptide IgG # 1	SIZE: 100 ug
Cat # DBH12-P	Human DBHcontrol/blocking peptide # 1	SIZE: 100 ug

Dopamine beta hydroxylase (DBH) or Dopamine beta monooxygenase belongs to the copper type II, ascorbate-dependent monooxygenase family. DBH mediates conversion of dopamine to noradrenaline. It requires PQQ, copper, and ascorbate for enzyme activity. DBH exists as both in a soluble form (in chromaffin granules) and as membrane bound anchored by its signal peptide. Its activity is enhanced by nerve growth factor, reserpine, acetylcholine, and glucocorticoids. There are two known forms of the enzymes: DBH-A and DBH-B, which differ in one position.

Bovine DBH is 610 aa protein (mouse 621 aa; rat 620 aa, human 603 aa. Human DBH is 603 aa protein (mouse 621 aa; rat 620 aa, bovine 610 aa). DBH also contains a signal peptide that is cleaved in the soluble form.

Source of Antigen, Antibodies

Antigen	18-aa peptide of human DBH (1) **Designated (DBH12-P or control peptide)** conjugated to KLH. **Epitope location** ~ N-terminal
Ab Host/type	Rabbit, polyclonal Aff pure IgG (**cat #DBH12-A) purified over antigen-agarose column**
2-ab	**Goat Anti-rabbit IgG-HRP** cat # 20320 (AP, biotin, FITC conjugates also available)
-ve conrol	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution lyophilized powder

Supplied in **Buffer**: PBS+0.1% BSA

Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder

Supplied in Buffer: PBS pH 7.5,

Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.

Shipping: 4oC for solutions and room temp for powder

Recommended Usage

Western Blotting (1:500-1:2K) using Chemiluminescence technique). Human adrenal medulla DBH is ~70-75 kDa.

Immunohistochemistry/IF: Not tested..

Specificity & Cross-reactivity

Human DBH12-P peptide sequence is 83% conserved in mouse, rat, and bovine DBH. Anti-DBH reacts with-human, monkey, bovine, rat, and sheep DBH. Other species not tested. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at:the web site).

General References:

Kobayashi k et al (1989) Nucl Acid res. 17, 1089-1102; Lamouroux A et al (1987) EMBO J 6, 3931-3937; McMahon A et al (1990) J. Neurosci. Res. 25, 395-404; Nakano T et al (1992) BBRC 189, 590-599; Neurosci. Lett (1990) 120, 141-145.

Citations of ADI's antibodies for DR (see updated list at: The web sit)

*This product is for In vitro research use only.

Related material available from ADI

Anti-Rabbit IgG-HRP Conjugate and ECL Reagents

NuGlo Chemiluminescent Substrate Kit

Western Blot Recycling Kit (Strips blots in 5 minutes)

DBH12-A-P 70313A

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