

## Product datasheet for **AP05769PU-N**

### DDC Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western Blot: 1/1000. This antibody detects a band of approximately 55kDa in rat adrenal medulla.
Reactivity:	Bovine, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	SDS denatured, recombinant bovine DOPA decarboxylase expressed <i>E. coli</i> and purified from inclusion bodies.
Specificity:	This antibody recognises DOPA decarboxylase (aromatic-L-amino acid decarboxylase, DDC).
Formulation:	10mM HEPES pH7.5, 150mM NaCl containing 0.09% Sodium Azide as preservative and 0.01% BSA, 50% Glycerol as stabilizer. State: Purified State: Liquid purified IgG fraction.
Purification:	Affinity Chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Database Link:	<a href="#">Entrez Gene 280762 Bovine P27718</a>



[View online »](#)

**Background:**

DOPA decarboxylase is an enzyme implicated in 2 metabolic pathways, synthesizing 2 important neurotransmitters: dopamine and serotonin which both play key roles in many clinical disorders, including Parkinson's disease. Following the hydroxylation of tyrosine to form L dihydroxyphenylalanine (LDOPA), catalyzed by tyrosine hydroxylase, DDC decarboxylates LDOPA to form dopamine. This neurotransmitter is found in different areas of the brain and is particularly abundant in basal ganglia. Dopamine is also produced by DDC in the sympathetic nervous system and is the precursor of the catecholaminergic hormones, noradrenaline and adrenaline in the adrenal medulla. In the nervous system, tryptophan hydroxylase produces 5 OH tryptophan, which is decarboxylated by DDC, giving rise to serotonin. DDC is a homodimeric, pyridoxal phosphate dependent enzyme.

**Synonyms:**

DOPA decarboxylase