Revision 1

Store at -20C

#13561

DDC (D6N8N) Rabbit mAb

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	48	Rabbit IgG	#P20711	1644

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

Specificity/Sensitivity

DDC (D6N8N) Rabbit mAb recognizes endogenous levels of total DDC protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val33 of human DDC protein.

Background

L-DOPA decarboxylase (DDC) is a pyridoxal 5-phosphate (PLP)-dependent enzyme that catalyzes the decarboxylation of L-DOPA to dopamine (1) and L-5HTP to serotonin (2). By catalyzing the reaction to produce dopamine, DDC is involved in many important metabolic processes and plays a central role in the complex neuroendocrine-immune regulatory network (1). DDC is expressed in the central nervous system (3), but has also been detected in some peripheral organs such as the liver and adrenal gland, as well as leukocytes of rat and human (1). DDC is thought to be the sole enzyme responsible for the synthesis of the trace amines 2-phenylethylamine, p-tyramine, and tryptamine, which are considered to act as neuromodulators (2,4). DDC is also regarded as a general biomarker for neuroendocrine tumors (3).

Background References

1. Zhou, Z. et al. (2011) *PLoS One* 6, e18596.
2. Børglum, A.D. et al. (1999) *Mol Psychiatry* 4, 545-51.
3. Kontos, C.K. et al. (2010) *Br J Cancer* 102, 1384-90.
4. Ma, J.Z. et al. (2005) *Hum Mol Genet* 14, 1691-8.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

Trademarks and Patents

Limited Uses

diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.