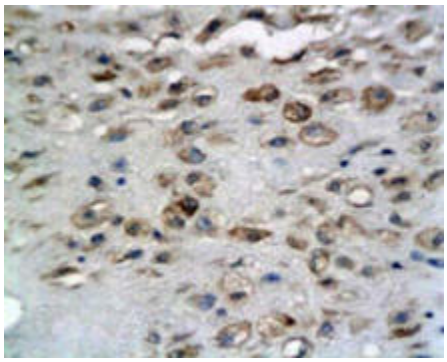
GTP-CH-1 Antibody

Subcategory: Rabbit Polyclonal Antibody
Cat. No.: 250680
Unit: 0.1 mg

Description:
GTP cyclohydrolase 1 (GTP-CH-1 or GCH-1) catalyzes the conversion of GTP to D-erythro-7,8-dihydroneopterin triphosphate, the first and rate-limiting step in tetrahydrobiopterin (BH4) biosynthesis. The final product (BH4) is an essential co-factor for three aromatic amino acid monooxygenases (F, Y, and W). Isoform GCH-1 is the functional enzyme. GTP-CH-1 positively regulates nitric oxide synthesis in umbilical vein endothelial cells (HUVEC). GTP-CH-1 deficiency is a cause of malignant hyperphenylalaninemia due to tetrahydrobiopterin deficiency. It is also responsible for defective neurotransmission due to depletion of the neurotransmitters dopamine and serotonin. GTP-CH-1 (DYT5) is a cause for dystonia 5, a DOPA-responsive dystonia, defined by sustained involuntary muscle contractions.

Isotype: Rabbit Ig
Applications: E, IHC, WB
Species Reactivity: Ch, H, Mk, Rb, R
Format: Each vial contains 0.1 mg IgG in 0.1 ml (1 mg/ml) of PBS pH7.4 with 0.09% sodium azide. Antibody was purified by Protein-G affinity chromatography.
Alternate Names: GCH-1; GTP cyclohydrolase I; GTP-CH-1; GTP cyclohydrolase 1; GTP-CH-I; GCH1; DYT5; GCH
Accession No.: P30793

Antigen: KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human GTP-CH-1.
Application Notes: E: 1:500-1:1,000; WB: 1:200-1:500; IHC: 1:200-1:500



GTP-CH-1 staining in human endometrium. Paraffin-embedded human endometrium tissue is stained with GTP-CH-1 Antibody (Cat. No. 250680) used at 1:200 dilution.

Storage: Store at -20°C. Minimize freeze-thaw cycles. Product is guaranteed one year from the date of shipment.

Product Citations: Meng C et al 2013. Neurological Sciences. 10.1007/s10072-013-1353-5. PMID# 23515624

For research use only, not for diagnostic or therapeutic procedures.