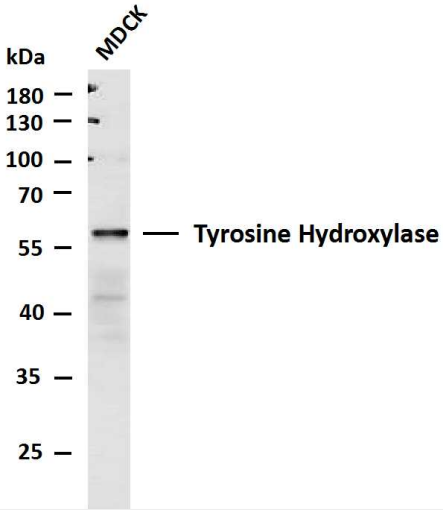
Tyrosine Hydrolase Mouse mAb(4B1)

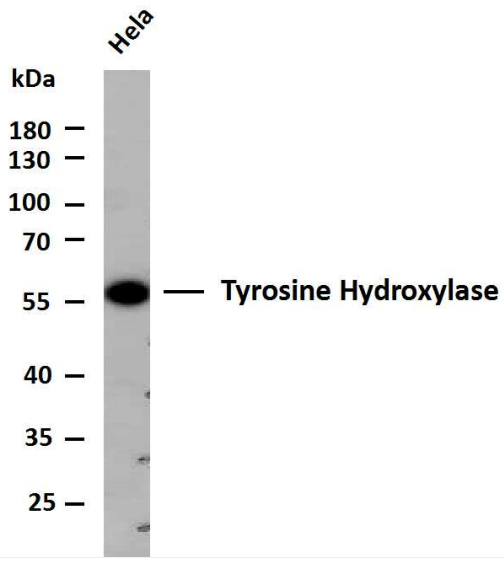
Catalog No	BYab-04791
Isotype	IgG
Reactivity	Human; Mouse;Rat
Applications	IHC;WB
Gene Name	TH TYH
Protein Name	Tyrosine 3-monooxygenase (EC 1.14.16.2) (Tyrosine 3-hydroxylase) (TH),Tyrosine Hydrolase
Immunogen	Synthesized peptide derived from human Tyrosine Hydrolase
Specificity	This antibody detects endogenous levels of Tyrosine Hydrolase at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.30% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC-p1:50-200 ,WB 1:1000-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Tyrosine 3-monooxygenase (EC 1.14.16.2) (Tyrosine 3-hydroxylase) (TH)
Observed Band	55kD
Cell Pathway	Cytoplasm, perinuclear region . Nucleus . Cell projection, axon . Cytoplasm . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle . When phosphorylated at Ser-19 shows a nuclear distribution and when phosphorylated at Ser-31 as well at Ser-40 shows a cytosolic distribution (By similarity). Expressed in dopaminergic axons and axon terminals. .
Tissue Specificity	Mainly expressed in the brain and adrenal glands.
Function	catalytic activity:L-tyrosine + tetrahydrobiopterin + O(2) = 3,4-dihydroxy-L-phenylalanine + 4a-hydroxytetrahydrobiopterin.,cofactor:Fe(2+) ion.,disease:Defects in TH are the cause of dystonia DOPA-responsive autosomal recessive (ARDRD) [MIM:605407]; also known as autosomal recessive Segawa syndrome. ARDRD is a form of DOPA-responsive dystonia presenting in infancy or early childhood. Dystonia is defined by the presence of sustained involuntary muscle contractions, often leading to abnormal postures. Some cases of ARDRD present with parkinsonian symptoms in infancy. Unlike all

	other forms of dystonia, it is an eminently treatable condition, due to a favorable response to L-DOPA.,enzyme regulation:Phosphorylation leads to an increase in the catalytic activity.,function:Plays an important role in the physiology of adrenergic neurons.,online information:Tyrosine hydroxylase entry,pathway:Ca
Background	The protein encoded by this gene is involved in the conversion of tyrosine to dopamine. It is the rate-limiting enzyme in the synthesis of catecholamines, hence plays a key role in the physiology of adrenergic neurons. Mutations in this gene have been associated with autosomal recessive Segawa syndrome. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

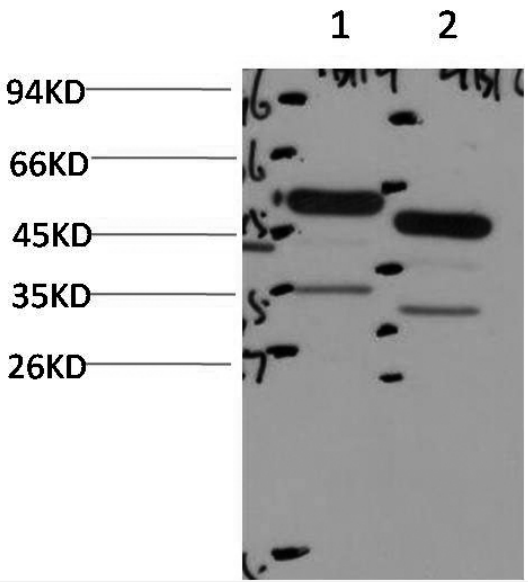
Products Images



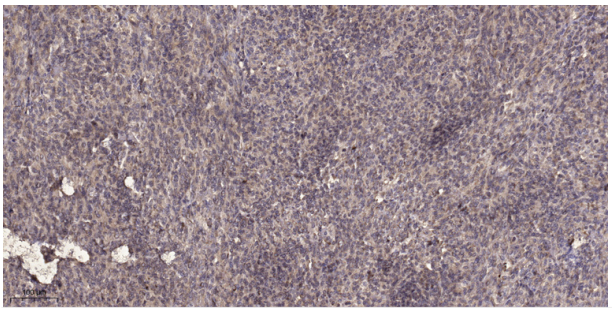
Whole cell lysates of MDCK were separated by 10% SDS-PAGE, and the membrane was blotted with anti-Tyrosine Hydroxylase antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: MDCK Predicted band size: 59kDa Observed band size: 59kDa



Whole cell lysates of Hela were separated by 10% SDS-PAGE, and the membrane was blotted with anti-Tyrosine Hydroxylase antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Predicted band size: 59kDa Observed band size: 59kDa



Western blot analysis of 1)PC12 Cell, 2) Mouse Brain Tissue Lysate using Tyrosine HydrolaseMouse Monoclonal mAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).