SPECIFICATION SHEET

Important Note: Centrifuge before opening to ensure complete recovery of vial contents.

Catalog #: Q43640M
Lot #: 5125710

Description: MAb to TRY,TRP,PHE Hydroxylase
Monoclonal Antibody to Human Tryptophan Hydroxylase (TRH), Tyrosine Hydroxylase (TYH) and Phenylalanine Hydroxylase (PAH)

Specificity: Binds a common epitope of Tryptophan hydroxylase (TRH), Tyrosine hydroxylase (TYH) and Phenylalanine hydroxylase (PAH).(1) TYH is the enzyme which converts tyrosine to dihydroxyphenylalanine (L-dopa), a precursor of the catecholamine neurotransmitters dopamine, noradrenaline and adrenaline. TRH is the enzyme that converts 5-hydroxytryptophan to serotonin. In fresh tissue the antibody binds to TYH and TRH so is a marker for TYH-containing catecholaminergic neurons,(2) and serotonergic neurons,(3-5) TRH can be used as a marker for serotonin as it converts 5-hydroxy-tryptophan to serotonin. Serotonin is rapidly metabolized and is unable to be detected by anti-serotonin antibodies in post mortem tissue. In human tissue that has been formalin-fixed, due to a change in the antigenic determinant of TYH, this product will bind only TRH.(3-5). The antibody can therefore be used to specifically identify serotonergic neurons in fixed human tissues. PAH can be detected in hepatic tissue sections.

Clone: PH8

Host Animal: Mouse
Isotype: IgG

Source: Ascites

Immunogen: Monkey phenylalanine hydroxylase

Format: Purified, Liquid

Purification: >99% pure (SDS-PAGE). Protein G chromatography
Product is 0.22µm filtered.

Concentration: 2mg/ml

Affinity Constant: Not determined

Buffer: PBS

Preservative: None

Applications: Can be used to identify dopaminergic and serotonergic neurons by immunohistochemistry and for Western blot analysis, immunoprecipitation and immunohistochemistry of TYH, PAH and TRH. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.

Storage: Store at 2–8°C.

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
References: The references listed below are for research purposes only.