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Lab & Production Materials

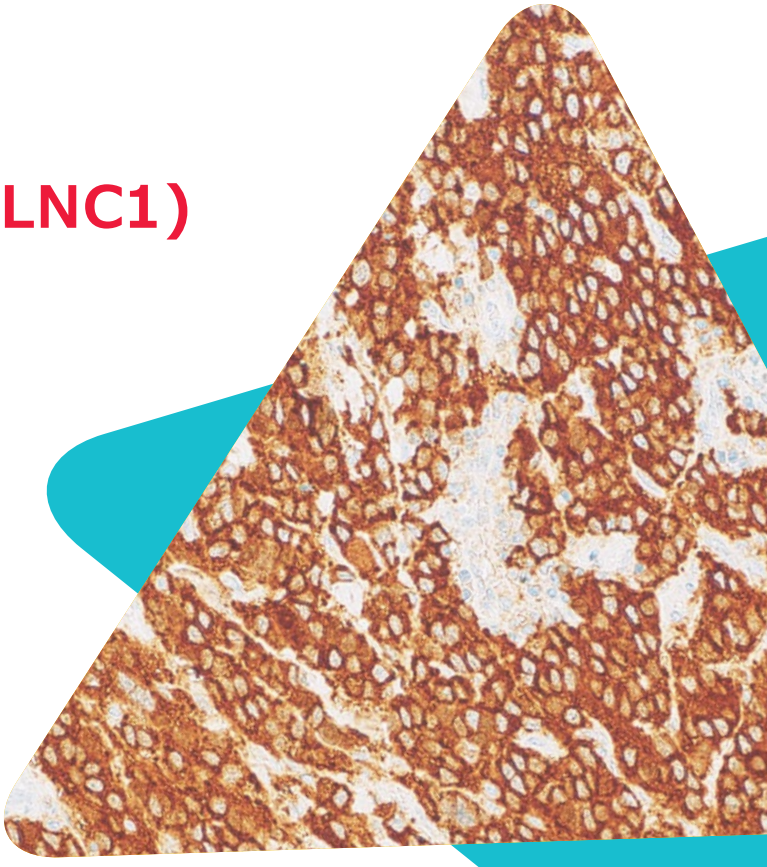
MERCK

Cell Marque™ Tissue Diagnostics

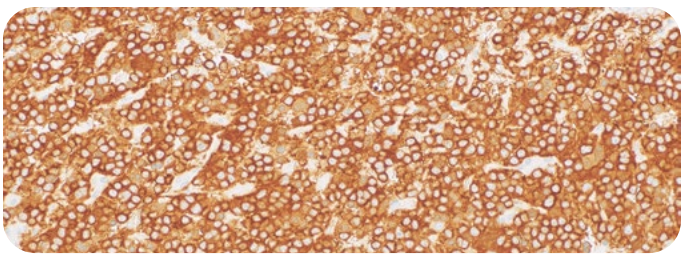
Tyrosine Hydroxylase (LNC1)

Mouse Monoclonal Antibody

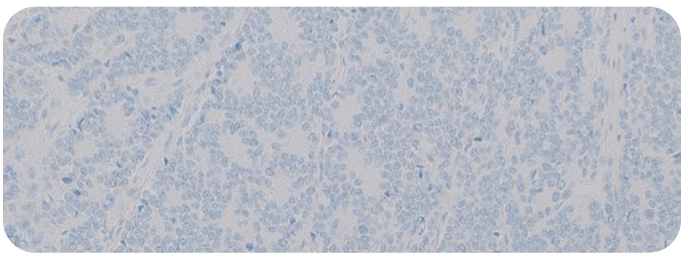
Tyrosine Hydroxylase (TYH) is the rate-limiting enzyme of catecholamine biosynthesiss.[1,2] TYH uses tetrahydrobiopterin and molecular oxygen to convert tyrosine to L-DOPA, a precursor to dopamine. Anti-TYH is sensitive and specific for peripheral neuroblastic tumors in the differential diagnosis from other tumors of childhood and shows high diagnostic utility. Anti-TYH has been shown to positively label all pheochromocytomas and sympathetic paragangliomas, and thus aids in differentiating them from their histologic mimics such as adrenocortical neoplasms.[3,4]



Neuroblastoma



Neuroblastoma



Ewing sarcoma (negative)

Ordering Information:

Description	Cat No.
0.1 mL concentrate	**490M-14**
0.5 mL concentrate	**490M-15**
1.0 mL concentrate	**490M-16**
1.0 mL predilute ready-to-use	**490M-17**
7.0 mL predilute ready-to-use	**490M-18**

Intended Use:

This antibody is intended for in vitro diagnostic (IVD) use.

Tyrosine Hydroxylase (LNC1) Mouse Monoclonal Antibody is intended for laboratory use in the detection of the Tyrosine Hydroxylase protein in formalin-fixed, paraffin-embedded human tissue stained in qualitative immunohistochemistry (IHC) testing.

The results using this product should be interpreted by a qualified pathologist in conjunction with the patient's relevant clinical history, other diagnostic tests and proper controls.

Product Information:

Visualization: Cytoplasmic
Controls: Neuroblastoma
Dilution Range: 1:25-1:100
Associated Specialty: Pediatric, Pathology

References:

1. Daubner, S Colette et al. "Tyrosine hydroxylase and regulation of dopamine synthesis." Archives of biochemistry and biophysics vol. 508,1 (2011): 1-12.
2. Loizou, L A. "Effect of inhibition of catecholamine synthesis on central catecholamine containing neurones in the developing albino rat." British journal of pharmacology vol. 41,1 (1971): 41-8.
3. Takemoto, Junkichi et al. "HuC/D expression in small round cell tumors and neuroendocrine tumors: a useful tool for distinguishing neuroblastoma from childhood small round cell tumors." Human pathology vol. 85 (2019): 162-167.
4. Warren, Mikako et al. "Utility of Phox2b immunohistochemical stain in neural crest tumours and non-neural crest tumours in paediatric patients." Histopathology vol. 72,4 (2018): 685-696.

The product featured belongs to the group *in vitro* diagnostic (IVD) medical devices. The product is classified as being IVD Class 1, exempt per US FDA regulation, and complies with the EU IVD Directive, bearing the CE logo on the label. The product featured is not available in all countries. Contact your local sales representative or distributor for details.

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