

Th, 1-498aa, Mouse, His-tag, Baculovirus

Cat.NO.: TP04197

3th Edition

Synonyms: Tyrosine 3-monooxygenase, Th, tyrosine hydroxylase.

Description: Th, also known as tyrosine 3-monooxygenase, is a rate-limiting enzyme in catecholamine synthesis. It uses tetrahydrobiopterin and molecular oxygen to convert tyrosine to DOPA. It regulates dopamine (DA) neurotransmission at the biosynthesis and reuptake steps. It plays an important role in the physiology of adrenergic neurons. It effects overexpression in lymphocytes on the differentiation and function of T helper cells. Recombinant mouse Th, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Form: Liquid. In Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.

Molecular Weight: 57.0kDa (507aa), 50-70kDa (SDS-PAGE under reducing conditions)

Sequences:

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ADPMPTPSASSPQPKGFRRRAVSEQDTKQAEAVTSPRFIGRRQSLIEDARKEREAAAAAAAAAVASAEPGNPLEAVV  
FEERDGNVAVLNLLFSLRGTKPSSLSRALKVFETFEAKIHLETRPAQRPLAGSPHLEYFVRFEVPSGDLAALLSSVR  
RVSDDVRSAREDKVPWFPRKVSSELDKCHHLVTKFDPDLDDHPGFSDQAYRQRRKLI AEIAFQYKQGEPIPHVEYT  
KEEIATWKEVYATLKGLYATHACREHLEAFQLLERYCGYREDSIPQLEDVSHFLKERTGFQLRPVAGLLSARDFLAS  
LAFRVFQCTQYIRHASSPMHSPEPDCHELLGHVPMADRTFAQFSQDIGLASLGASDEEIEKLSTVYWFTVEFGL  
CKQNGELKAYGAGLLSSYGELLHSLSEEPEVRAFPDPTAAVQPYQDQTYQPVYFVSESFSDAKDKLRNYASRIQR  
PFSVKFDPYTLAIDVLDSPHTIRRSLEGVQDELHTLTQALSAISHHHHHH
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Purity: > 95% by HPLC

Concentration: 0.25mg/ml (determined by Absorbance at 280nm)

Endotoxin Level: <1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.