NKMAXBio we support you, we believe in your research Recombinant mouse Tyrosine Hydroxylase protein Catalog Number: ATGP3438

## **PRODUCT INFORMATION**

**Expression system** Baculovirus

**Domain** 1-498aa

**UniProt No.** P24529

NCBI Accession No. NP\_033403.1

Alternative Names Tyrosine 3-monooxygenase, Th, tyrosine hydroxylase

# **PRODUCT SPECIFICATION**

Molecular Weight 57 kDa (507aa)

**Concentration** 0.25mg/ml (determined by absorbance at 280nm)

#### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

#### Purity

> 90% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

**Tag** His-Tag

Application SDS-PAGE

#### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### 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.

#### **Amino acid Sequence**

<ADP>MPTPSAS SPQPKGFRRA VSEQDTKQAE AVTSPRFIGR RQSLIEDARK EREAAAAAAA AAVASAEPGN PLEAVVFEER DGNAVLNLLF SLRGTKPSSL SRALKVFETF EAKIHHLETR PAQRPLAGSP HLEYFVRFEV PSGDLAALLS SVRRVSDDVR SAREDKVPWF PRKVSELDKC HHLVTKFDPD LDLDHPGFSD QAYRQRRKLI AEIAFQYKQG EPIPHVEYTK EEIATWKEVY ATLKGLYATH ACREHLEAFQ LLERYCGYRE DSIPQLEDVS HFLKERTGFQ LRPVAGLLSA RDFLASLAFR VFQCTQYIRH ASSPMHSPEP DCCHELLGHV PMLADRTFAQ FSQDIGLASL GASDEEIEKL STVYWFTVEF GLCKQNGELK AYGAGLLSSY GELLHSLSEE PEVRAFDPDT AAVQPYQDQT YQPVYFVSES FSDAKDKLRN YASRIQRPFS VKFDPYTLAI DVLDSPHTIR RSLEGVQDEL HTLTQALSAI S<HHHHHH>

#### **General References**

Yamada K., et al. (1992) Histochemistry. 97:201-206. Daubner SC., et al. (2011) Arch Biochem Biophys. 508:1-12.

## DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

