

## PTS polyclonal antibody

Catalog: BS8117

Host: Rabbit

Reactivity: Human, Mouse, Rat

### BackGround:

The tetrahydrobiopterin (BH4) cofactor is essential for hepatic hydroxylase, which is involved in phenylalanine degradation and catecholamine and serotonin biosynthesis. BH4 is also an essential and limiting cofactor for all types of nitric oxide synthase. BH4 deficiency results in hyperphenylalaninemia and

monoamine neurotransmitter depletion and is most commonly due to autosomal recessive mutation in 6-pyruvoyltetrahydropterin synthase (PTPS), the second enzyme for BH4 biosynthesis. The active site of PTPS consists of the

pterin-anchoring Glu A107 neighbored by two catalytic motifs: a Zn(II) binding site and an inter-subunit catalytic triad formed by Cys A42, Asp B88 and His B89. The active site of PTPS undergoes a Zn and Mg-dependent reaction that

includes a triphosphate elimination, a stereospecific reduction and the oxidation of both side hydroxyl groups. The catalytic triad of PTPS is involved in the deprotonation of the side-chain carbons of substrates. In addition, Ser 19 of human PTPS may be a substrate for cGMP-dependent protein kinase type II

phosphorylation in vivo, which is essential for normal activity of PTPS.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

~ 16 kDa

### Swiss-Prot:

Q03393

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:500~1:2000

IF: 1:50~1:200

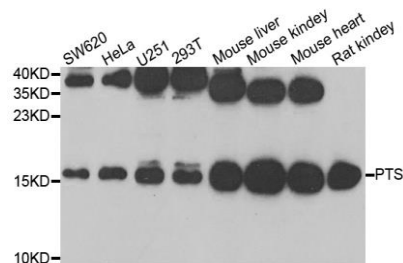
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

PTS polyclonal antibody detects endogenous levels of PTS protein.

### DATA:



WesternBlot (WB) analysis of PTS polyclonal antibody

### Note:

For research use only, not for use in diagnostic procedure.

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