



# Recombinant Protein Technical Manual

**Recombinant Human DBH/Dopamine beta-Hydroxylase Protein (His Tag)**  
RPES5077

## Product Data:

**Product SKU:** RPES5077

**Size:** 10µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** P09172

## Protein Information:

**Molecular Mass:** 67.3 kDa

**AP Molecular Mass:** 68 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** DBM

## Immunogen Information:

**Sequence:** Ser26-Gly603

## Background:

DBH is a 290 kDa copper-containing oxygenase. It can be detected in noradrenergic nerve terminals of the central and peripheral nervous systems, and is also expressed in chromaffin cells of the adrenal medulla. DBH contains four identical subunits, and its activity requires ascorbate as a cofactor. It functions in the synthesis of small-molecule neurotransmitters that is membrane-bound, making norepinephrine the only transmitter synthesized inside vesicles. DBH has been shown to be associated with decision making and addictive behaviors such as alcohol and smoking, attention deficit hyperactivity disorder, and also with neurological diseases such as Schizophrenia and Alzheimer's.