



# Recombinant Protein Technical Manual

## Recombinant Human BBOX1/Gamma-BBH Protein (His & GST Tag) RPES3536

### Product Data:

**Product SKU:** RPES3536

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** O75936

### Protein Information:

**Molecular Mass:** 72.5 kDa

**AP Molecular Mass:** 65 kDa

**Tag:** N-His & GST

**Bio-activity:**

**Purity:** > 85 % 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 20mM Tris, 500mM NaCl, 10% glycerol, pH 8.0

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

**Application:**

**Synonyms:** BBH;BBOX;G-BBH;gamma-BBH

## Immunogen Information:

**Sequence:** Met 1-Asn387

## Background:

BBOX1, also known as gamma-BBH, belongs to the gamma-BBH/TMLD family. It is highly expressed in kidney and moderately expressed in liver. BBOX1 catalyzes the formation of L-carnitine from gamma-butyrobetaine, the last step in the L-carnitine biosynthetic pathway. Carnitine is essential for the transport of activated fatty acids across the mitochondrial membrane during mitochondrial beta-oxidation. BBOX1 is an inhibition target for mildronate which can be used to treat angina and myocardial infarction. Mildronate may also be beneficial for the treatment of neurological disorder, diabetes, and seizures and alcohol intoxication.