



Recombinant Protein Technical Manual

Recombinant Human RPE Protein (E. coli, His Tag)

RPES2428

Product Data:

Product SKU: RPES2428

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q96AT9

Protein Information:

Molecular Mass: 25.9 kDa

AP Molecular Mass: 28 kDa

Tag: C-6His

Bio-activity:

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

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

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 6.2.

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

Application:

Synonyms: Ribulose-Phosphate 3-Epimerase; Ribulose-5-Phosphate-3-Epimerase; RPE; HUSSY7;RPE2

Immunogen Information:

Sequence: Met 1-Arg228

Background:

Ribulose-Phosphate 3-Epimerase (RPE) is a member of the Ribulose-Phosphate 3-Epimerase family. RPE exists as a homodimer and catalyzes the reversible epimerization of D-ribulose 5-phosphate to D-xylulose 5-phosphate. RPE binds one divalent metal cation per subunit and contains tightly bound Fe^{2+} when produced in *E. coli*, but the physiological cofactor may be Co^{2+} , Mn^{2+} or Zn^{2+} . It has been shown that RPE participates in 3 metabolic pathways: pentose phosphate pathway, pentose and glucuronate interconversions, and carbon fixation.