



Recombinant Protein Technical Manual

Recombinant Human NSE/ENO2 Protein (His Tag)

RPES2591

Product Data:

Product SKU: RPES2591

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P09104

Protein Information:

Molecular Mass: 49.4 kDa

AP Molecular Mass: 55 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 protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 µm filtered solution of 20mM Tris, 100mM KCl, 5mM MgSO₄, pH 7.5.

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

Application:

Synonyms: Gamma-enolase; 2-phospho-D-glycerate hydro-lyase; Enolase 2; Neural enolase; Neuron-specific enolase; NSE; ENO2

Immunogen Information:

Sequence: Met1-Leu434

Background:

Gamma-enolase, also known as Enolase 2, belongs to the enolase family. The alpha/alpha homodimer of ENO2 is expressed in embryo and in most adult tissues. The alpha/beta heterodimer and the beta/beta homodimer are found in striated muscle, and the alpha/gamma heterodimer and the gamma/gamma homodimer in neurons. During ontogenesis, there is a transition from the alpha/alpha homodimer to the alpha/beta heterodimer in striated muscle cells, and to the alpha/gamma heterodimer in nerve cells. Levels of ENO2 increase dramatically in cardiovascular accidents, cerebral trauma, brain tumors and Creutzfeldt-Jakob disease. ENO2 has neurotrophic and neuroprotective properties on a broad spectrum of central nervous system (CNS) neurons. It binds to cultured neocortical neurons and promotes cell survival in a calcium-dependent manner.