

## Recombinant Human NSE/ENO2 Protein (His Tag)

**Catalog No.** PKSH033672

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

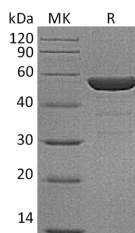
### Description

<b>Synonyms</b>	Gamma-enolase;2-phospho-D-glycerate hydro-lyase;Enolase 2;Neural enolase;Neuron-specific enolase;NSE;ENO2
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Met1-Leu434
<b>Accession</b>	P09104
<b>Calculated Molecular Weight</b>	49.4 kDa
<b>Observed molecular weight</b>	55 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 8% Sucrose, 0.05% Tween 80, pH 7.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

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.