Data Sheet (Cat.No.TMPY-04434)

TargetMol

Src Protein, Mouse, Recombinant (His & GST)

General Information

Synonyms:	SRC proto-oncogene, non-receptor tyrosine kinase;AW259666;pp60c-src
Protein Construction:	A DNA sequence encoding the mouse SRC (NP_001020566.111) (Met 1-Leu 535) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Mouse
Expression Host:	Baculovirus Insect Cells
Accession:	NP_001020566.111
Molecular Weight:	87.7 kDa (predicted); 80 kDa (reducing conditions)

QC Testing

Biological Activity:	1. The specific activity was determined to be ＞80 nmol/min/mg using poly [Glu, Tyr] 4:1 as substrate. 2. Measured by its binding ability in a functional ELISA. Immobilized recombinant Mouse SRC at 2 μg/ml (100 μl/well) can bind biotinylated human PTPRA (aa 174-793) with a linear range of 0.032-0.8 μg/ml.
Purity:	＞90 % as determined by SDS-PAGE
Endotoxin:	＜1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Supplied as sterile 20 mM Tris, 500 mM NaCl, 10% gly, pH 8.0.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

Protein Background

Proto-oncogene tyrosine-protein kinase SRC is a hydrophobic protein belonging to the SRC family kinase including nine members that is a family of non-receptor tyrosine kinases. SRC protein may exist in different forms: C-SRC and V-SRC. C-SRC is only activated under certain circumstances where it is required such as growth factor signaling, while V-SRC is constitutively active as opposed to normal SRC (C-SRC). Thus, V-SRC is an instructive

example of an oncogene protein kinase whereas C-SRC is a proto-oncogene protein kinase. Inhibition of SRC with NR2A tyrosine phosphorylation mediated by PSD-95 may contribute to the lithium-induced downregulation of NMDA receptor function and provide neuroprotection against excitotoxicity.

Reference

Juan Ma. et al., 2003, Neuroscience Letters. 348 (3): 185-189.
Czernilofsky AP. et al., 1980, Nature. 287: 198-203.
Beischlag TV. et al., 2002, Molecular and cellular biology. 22 (12): 4319-33.