Recombinant Protein Technical Manual

Recombinant Mouse SMAD3 Protein (His & GST Tag)

RPES3358

Product Data:

Product SKU: RPES3358

Size: 20µg

Species: Mouse

Expression host: Baculovirus-Insect Cells

Uniprot: P84025

Protein Information:

Molecular Mass:	75.9 kDa
AP Molecular Mass:	
Tag:	N-His-GST
Bio-activity:	
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per µg of the protein 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, 2mM GSH, 10% glycerol, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	AU022421;Madh3

Immunogen Information:

Sequence: Met1-Ser425

Background:

SMAD3 belongs to the SMAD family. Members of this family mediate signal transduction by the TGF-beta/activin/BMP-2/4 cytokine superfamily from receptor Ser/Thr protein kinases at the cell surface to the nucleus. SMAD3 is involved in cell signalling. It modulates signals of activin and TGFβ's. Binding of SMAD3 with SMAD4 enables its transmigration into the nucleus where it forms complexes with other proteins and acts as a transcription factor. SMAD3 is a receptor-regulated SMAD (R-SMAD). In mice, mutation of SMAD3 has been linked to colorectal adenocarcinoma, increased systemic inflammation, and accelerated wound healing. Increased SMAD3 activity has been implicated in the pathogenesis of scleroderma. Smad3 is also a multifaceted regulator in adipose physiology and the pathogenesis of obesity and type 2 diabetes.