

## 32-8102: Recombinant Human SMAD Family Member 1/SMAD1 (N-GST)(Discontinued)

**Gene :** SMAD1  
**Gene ID :** 4086  
**Uniprot ID :** Q15797

### Description

Source: E.coli.  
MW :78.69kD.

Recombinant Human SMAD1 is produced by our E.coli expression system and the target gene encoding Met1-Ser465 is expressed with a GST tag at the N-terminus. SMAD Family Member 1 (SMAD1) is a member of the dwarfin/SMAD family. SMAD1 has the highest expression in the heart and skeletal muscle, containing one MAD homology 1 domain and one MAD homology 2 domain. As a transcriptional modulator SMAD 1 is activated by bone morphogenetic proteins type 1 receptor kinase. Defects in SMAD1 may cause primary pulmonary hypertension (PPH1), characterized by plexiform lesions of proliferating endothelial cells in pulmonary arterioles. The lesions lead to elevated pulmonary arterial pressure, right ventricular failure and death.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 8.0 .  
**Storage condition :** 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.  
**Amino Acid :** MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELGLEFPNLPYYIDGDVKLTQSMAIIRYIA  
DKHNMLGGCPKERAIEISMLEGAVLDIRYGVSRAYSKDFETLKVDFLSKLPMLKMFEDRLCHKTYLNGDHVTH  
PDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIQIDKYLKSSKYIAWPLQGWQATFGGGDHPPKSDLVPR  
GSHMNVTSLSFTSPAVKRLGKQGDDEEKWAEKAVDALVKLKKKKGAMEELEKALSCPGQPSNVCVTIPRS  
LDGRLQVSHRKGLPHVIYCRVWRWPDQLQSHHELKPLECCEFPFGSKQKEVCINPYHYKRVESPVLPVLPVPRHS  
EYNPQHSLLAQFRNLGQNEPHMPLNATFPDSFQQPNSHPFPHSPNSSYPNSPGSSSSTYPHSPTSSDPGSPFQ  
MPADTPPPAYLPPEDPMTQDGSQPMDTNMMAPPLPSEINRGDVQAVAYEEPKHWCIVVYELNNRVGEAFHA  
SSTSVLVDGFTDPSNNKNRFCLGLLSNVNRNSTIENTRRHIGKGVHLYYVGGEVYAECLSDSSIFVQSRNCNYH  
HGFHPTTVCKIPSGCSLKIFNNQEFQAQLLAQSVNHGFETVYELTKMCTIRMSFVKGWGAEYHRQDVTSTPCWIE  
IHLHGPLQWLDKVLTQMGSHPNPISSVS

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.