

## Recombinant Mouse Smad5 Protein

Catalog No. PKSM040515

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

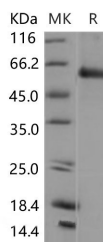
### Description

<b>Synonyms</b>	1110051M15Rik;AI451355;Dwf-C;Madh5;MusMLP
<b>Species</b>	Mouse
<b>Expression Host</b>	Baculovirus-Insect Cells
<b>Sequence</b>	Thr2-Ser465
<b>Accession</b>	P97454
<b>Calculated Molecular Weight</b>	52.2 kDa
<b>Observed molecular weight</b>	57 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 90 % 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 sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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



> 90 % as determined by reducing SDS-PAGE.

### Background

SMAD5 is a member of 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.

### For Research Use Only

SMAD5 is involved in the TGF-beta signaling pathway that results in an inhibition of the proliferation of hematopoietic progenitor cells. It is also involved in cell signalling and modulates signals of bone morphogenetic proteins (BMP's). The binding of ligands causes the oligomerization and phosphorylation of the SMAD5 protein. SMAD5 is a receptor regulated SMAD (R-SMAD) and is activated by bone morphogenetic protein type 1 receptor kinase.