# Recombinant Human SMAD3 Protein (His &Flag Tag)

Catalog Number: PKSH032763



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

Description			4 ·
	I I O C	OPIN	tion

 Species
 Human

 Mol\_Mass
 50.5 kDa

 Accession
 P84022

**Bio-activity** Not validated for activity

## **Properties**

**Purity** > 85 % as determined by reducing SDS-PAGE.

**Endotoxin**  $\leq 1.0 \text{ EU per } \mu \text{g of the protein as determined by the LAL method.}$  **Storage** Storage Stor

**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

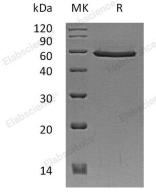
packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 500mM NaCl, 10% Glycerol,

2mM EDTA, pH 8.0.

**Reconstitution** Not Applicable

#### Data



> 85 % as determined by reducing SDS-PAGE.

# Background

Mothers against decapentaplegic homolog 3(SMAD3) is a cytoplasm protein which belongs to the dwarfin/SMAD family. Smad proteins undergo rapid nuclear translocation upon stimulation by transforming growth factor and in so doing transduce the signal into the nucleus. Receptor-regulated SMAD is an intracellular signal transducer and transcriptional modulator activated by TGF-beta and activin type 1 receptor kinases. SMAD3 binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD3/SMAD4 complex, activates transcription. It also can form a SMAD3/SMAD4/JUN/FOS complex at the AP-1/SMAD site to regulate TGF-beta-mediated transcription. SMAD3 has an inhibitory effect on wound healing probably by modulating both growth and migration of primary keratinocytes and by altering the TGF-mediated chemotaxis of monocytes. This effect on wound healing appears to be hormone-sensitive.

## For Research Use Only