

Recombinant Mouse TWSG1 Protein (His tag)

Cat.NO.: TP08103

3th Edition

Synonyms:1810013J15Rik;9030422N06Rik;AW552143;D17Ert403e;Tsg;Tgw

Description:TWSG1 belongs to the twisted gastrulation protein family. TWSG1 from different species are functionally equivalent. In contrast to Drosophila where TWSG1 expression is limited to early embryos, expression of TWSG1 is found throughout mouse and human development. Mutations in the TWSG1 gene cause at least some of the cells on the dorsal half of the embryo to adopt more ventral cell fates. This is thought to involve gradients of the signaling molecule decapentaplegic. TWSG1 may function as a bone morphogenetic protein signalling agonist or antagonize these activities. It can dislodge latent bone morphogenetic proteins and thus provides a permissive signal that allows high BMP signaling in the embryo. TWSG1 is a cofactor in the antagonism of chordin to BMP signaling. It also binds both the vertebrate Decapentaplegic ortholog BMP4 and chordin and forms ternary complexes. Meanwhile, TWSG1 increases binding of chordin to BMP4, potentiates the ability of chordin to induce secondary axes in Xenopus embryos, and enhances chordin cleavage by vertebrate proteases related to tolloid at a site poorly used in the absence of TWSG1. The presence of TWSG1 enhances the secondary axis-inducing activity of 2 products of chordin cleavage.

Form:PBS

Molecular Weight:23.6 kDa

Sequences:Met 1-Phe 222

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.