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32-8034: Recombinant Human Mothers Against Decapentaplegic Homolog 2/SMAD2 (N-6His-Flag)(Discontinued)

Gene ID: SMAD2 **Gene ID:** 4087 **Uniprot ID:** Q15796

Description

Source: E.coli. MW:54.6kD.

Recombinant Human Mothers Against Decapentaplegic Homolog 2 is produced by our E.coli expression system and the target gene encoding Ser2-Ser467 is expressed with a 6His, Flag tag at the N-terminus. Mothers against decapentaplegic homolog 2(SMAD2) 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. SMAD2 is contains 1 MH1 (MAD homology 1) domain and1 MH2 (MAD homology 2) domain. It is expressed at high levels in skeletal muscle, endothelial cells, heart and placenta. It binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD2/SMAD4 complex, activates transcription. It may act as a tumor suppressor in colorectal carcinoma. And SMAD2 positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

Product Info

Amount: 10 μg / 50 μg

Content: Lyophilized from a 0.2 μm filtered solution of 20mM PB,500mM NaCl, pH7.5.

Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks.

Storage condition : 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: MRGSHHHHHHGSDYKDDDDKSSILPFTPPVVKRLLGWKKSAGGSGGAGGGEQNGQEEKWCEKAVKSLVKK

LKKTGRLDELEKAITTQNCNTKCVTIPSTCSEIWGLSTPNTIDQWDTTGLYSFSEQTRSLDGRLQVSHRKGLPHV IYCRLWRWPDLHSHHELKAIENCEYAFNLKKDEVCVNPYHYQRVETPVLPPVLVPRHTEILTELPPLDDYTHSIPE NTNFPAGIEPQSNYIPETPPPGYISEDGETSDQQLNQSMDTGSPAELSPTTLSPVNHSLDLQPVTYSEPAFWCSI AYYELNQRVGETFHASQPSLTVDGFTDPSNSERFCLGLLSNVNRNATVEMTRRHIGRGVRLYYIGGEVFAECLS DSAIFVQSPNCNQRYGWHPATVCKIPPGCNLKIFNNQEFAALLAQSVNQGFEAVYQLTRMCTIRMSFVKGWGA

EYRRQTVTSTPCWIELHLNGPLQWLDKVLTQMGSPSVRCSSMS

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 $\tilde{A} \square \hat{A} \mu g/ml$. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin: Less than 0.1 ng/ $\tilde{A} \square \hat{A} \mu g$ (1 IEU/ $\tilde{A} \square \hat{A} \mu g$) as determined by LAL test.