

FAST-1 (86-365): sc-4450 WB

BACKGROUND

Xenopus winged-helix factor, xFAST-1 (forkhead activin signal transducer-1) is a transcription factor that forms a complex with the receptor-regulated Smad protein, Smad2, and directly binds to activin response elements on DNA. The human homolog FAST-1 and the corresponding mouse homolog, designated FAST-2, share significant sequence homology with xFAST-1, including a conserved N-terminal forkhead domain that consists of 110 amino acid residues and is essential for binding DNA and regulating transcription in embryogenesis, in tumorigenesis and in the maintenance of differentiated cell states. FAST-1 and FAST-2 also contain a distinct C-terminal Smad interaction domain that is required for the association with various Smad proteins, including Smad2, Smad3 and Smad4. Expression of FAST-1 and FAST-2 is predominantly observed during early development, with lower levels detected in adult tissues. FAST-1 and FAST-2 mediated DNA binding is attenuated by both TGF β and activin, indicating that these FAST proteins mediate TGF β induced signal transduction.

REFERENCES

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SOURCE

FAST-1 (86-365) is expressed in *E. coli* as a 58 kDa tagged fusion protein corresponding to amino acids 86-365 of FAST-1 of human origin.

PRODUCT

FAST-1 (86-365) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 μ g in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

FAST-1 (86-365) is suitable as a Western blotting control for sc-12437 and sc-14031.

STORAGE

Store at -20 $^{\circ}$ C; stable for one year from the date of shipment.

RESEARCH USE

For research use only, not for use in diagnostic procedures.