SANTA CRUZ BIOTECHNOLOGY, INC.

SARA (1-300): sc-4493 WB



BACKGROUND

SARA (NSP, SARA, MADHIP, SMADIP, ZFYVE9, zinc finger FYVE domain containing 9) is a double zinc finger (FYVE domain) protein that influences the recruitment of Smad proteins to the TGF β receptor and ensures appropriate subcellular localization of the activated receptor-bound complex. The FYVE domain in SARA directs localization to early endosomal compartments where it can interact with TGF β receptors and Smads. Promyelocytic leukemia (PML) tumour suppressor physically interacts with Smad2/3 and SARA and promotes association and accumulation of SARA and TGF β receptor in early endosome. SARA can enhance recruitment of protein phosphatase 1 catalytic subunit (PP1c) to Smad7-GADD34 complex by controlling the specific subcellular localization of PP1c. Dephosphorylation of TGF β receptor by Smad7 is an effective mechanism for governing negative feedback in TGF β signaling.

REFERENCES

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SOURCE

SARA (1-300) is expressed in *E. coli* as a 60 kDa tagged fusion protein corresponding to amino acids 1-300 of SARA of human origin.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

PRODUCT

SARA (1-300) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 μg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

SARA (1-300) is suitable as a Western blotting control for sc-8881 and sc-9135.

RESEARCH USE

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