

# SAS-6 (91.390.21): sc-81431

## BACKGROUND

SAS-6 (spindle assembly abnormal protein 6 homolog, HsSAS-6) is a 657 amino acid protein encoded by the human gene SAS6. SAS-6 is a component of the centrosome that contains one PISA (present in SAS-6) domain. LK4, SAS-6, CPAP and other centriole related proteins are required at different stages of procentriole formation and were associated with different centriolar structures. SAS-6 associates only transiently with nascent procentrioles, whereas CEP135 and CPAP form a core structure within the proximal lumen of both parental and nascent centrioles. SAS-6 is necessary for procentriole formation in human cell lines and is localized asymmetrically next to the centriole at the onset of procentriole formation. SAS-6 levels oscillate during the cell cycle; it is degraded in mitosis starting at anaphase, and it accumulates again at the end of the following G<sub>1</sub> phase. The anaphase-promoting complex targets SAS-6 for degradation by the 26S Proteasome, and a KEN box in the C-terminus of SAS-6 is necessary for its degradation. Increased SAS-6 levels promoted the formation of multiple procentrioles forming next to a single centriole.

## CHROMOSOMAL LOCATION

Genetic locus: SASS6 (human) mapping to 1p21.2; Sass6 (mouse) mapping to 3 G1.

## SOURCE

SAS-6 (91.390.21) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 404-657 of SAS-6 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SAS-6 (91.390.21) is available conjugated to agarose (sc-81431 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-81431 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-81431 PE), fluorescein (sc-81431 FITC), Alexa Fluor<sup>®</sup> 488 (sc-81431 AF488), Alexa Fluor<sup>®</sup> 546 (sc-81431 AF546), Alexa Fluor<sup>®</sup> 594 (sc-81431 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-81431 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-81431 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-81431 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

SAS-6 (91.390.21) is recommended for detection of SAS-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

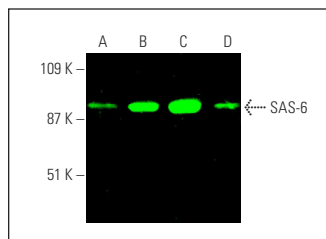
Suitable for use as control antibody for SAS-6 siRNA (h): sc-76454, SAS-6 siRNA (m): sc-76455, SAS-6 shRNA Plasmid (h): sc-76454-SH, SAS-6 shRNA Plasmid (m): sc-76455-SH, SAS-6 shRNA (h) Lentiviral Particles: sc-76454-V and SAS-6 shRNA (m) Lentiviral Particles: sc-76455-V.

Molecular Weight of SAS-6: 74 kDa.

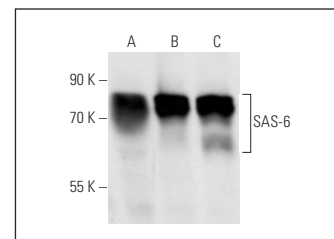
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



SAS-6 (91.390.21): sc-81431. Near-infrared western blot analysis of SAS-6 expression in human testis tissue extract (A) and U-2 OS (B), MOLT-4 (C) and Hep G2 (D) whole cell lysates. Blocked with UltraCruz<sup>®</sup> Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.



SAS-6 (91.390.21): sc-81431. Western blot analysis of SAS-6 expression in human testis tissue extract (A) and U-2 OS (B) and MOLT-4 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Kodani, A., et al. 2010. Par6  $\alpha$  interacts with the dynactin subunit p150 Glued and is a critical regulator of centrosomal protein recruitment. *Mol. Biol. Cell* 21: 3376-3385.
- Wang, W.J., et al. 2013. CEP162 is an axoneme-recognition protein promoting ciliary transition zone assembly at the cilia base. *Nat. Cell Biol.* 15: 591-601.
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- Shukla, A., et al. 2015. Plk1 relieves centriole block to reduplication by promoting daughter centriole maturation. *Nat. Commun.* 6: 8077.
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- Tsuchiya, Y., et al. 2016. Cep295 is a conserved scaffold protein required for generation of a bona fide mother centriole. *Nat. Commun.* 7: 12567.
- Shumilov, A., et al. 2017. Epstein-Barr virus particles induce centrosome amplification and chromosomal instability. *Nat. Commun.* 8: 14257.
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## RESEARCH USE

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

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