Technical Data Sheet

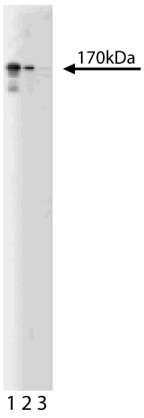
Purified Mouse Anti-Sos1

Product Information

Material Number:	**610096**
Size:	150 µg
Concentration:	250 µg/ml
Clone:	25/SOS1
Immunogen:	Mouse mSos1 aa. 1-109
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Mouse, Dog, Human
Target MW:	170 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

The *Sos (son of sevenless)* gene was originally identified in *Drosophila,* and two mammalian homologues (*mSos1* and *mSos2*) were isolated from a mouse cDNA library. These two cDNAs predict proteins that are approximately 70% identical in their amino acid residues. Both *mSos1* and *mSos2* are expressed in a wide number of mouse embryonic and adult tissues as well as in several cell lines. The human homologues, *hSos1* and *hSos2* have also been isolated and show a very high degree of amino acid identity to the mouse genes (98% for Sos1). Sos1 has a predicted molecular weight of 150kDa, but the apparent molecular weight is closer to 170 kDa, presumably due to a high proline content. The mammalian Sos1 protein has a highly specific guanine nucleotide exchange activity toward p21ras . In EGF-stimulated cells, Sos1 interacts with the SH3 domains of GRB2, and GRB2 binds via its SH2 domain to tyrosine 1068 of the activated EGF receptor. Thus, GRB2 recruits Sos1 to the plasma membrane and enables it to activate the Ras signaling pathway by enhancing GTP loading on p21ras .



Western blot analysis of Sos1 on PC12 lysate. *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Sos1.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Tested During Development
Immunohistochemistry	Not Recommended

Suggested Companion Products

Catalog Number	Name	Size	Clone
611454	PC12 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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