Cell Signaling

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Applications:	Reactivity:	Sensivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-Bond, IHC-P		Endogenous	25	Rabbit IgG	Q16384	6756
Product Usage Information			While the SSX family of proteins is well characterized in SS, little is known outside of			

Application Dilution Western Blotting 1:1000 Immunoprecipitation 1:100 IHC-Leica® Bond™ 1:100 - 1:400 Immunohistochemistry (Paraffin) 1:50 - 1:200

this context. The conserved N-terminus of the SSX family contains a KRAB domain which seems to function as a transcriptional repressor (3).

- Kadoch, C. and Crabtree, G.R. (2013) Cell 153, 71-85.
- 2. Perani, M. et al. (2003) Oncogene 22, 8156-67.
- 3. Lim, F.L. et al. (1998) Oncogene 17, 2013-8.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20° C. Do not aliquot the

Specificity / Sensitivity

SSX (E5A2C) Rabbit mAb (Carboxy-terminal Antigen) recognizes endogenous levels of total SSX1-4 proteins. This antibody also detects the SS18-SSX fusion protein.

Species Reactivity:

Human

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln173 of human SSX1 protein.

The SS18-SSX fusion proteins are a result of in-frame fusions that fuse the SS18 gene on chromosome 18 with X chromosome genes SSX1, SSX2, and to a lesser extent SSX4 (1). Human synovial sarcoma (SS) accounts for 8-10% of all soft tissue malignancies and 95% of these malignancies express the recurrent translocation of the SS18 gene on chromosome 18 (1). The N-terminal SNH domain (SYT N-terminal homology domain) of the SS18 protein interacts with SWI/SNF chromatin remodeling complexes via the N terminal region of BRM and BRG1 subunits (2). Studies of the SS18-SSX fusion in SS suggest that endogenous SS18 competes with the mutant SS18-SSX fusion for occupancy in the SWI/SNF complexes resulting in the displacement of the SNF5 (BAF47) subunit. Displacement of the SNF5 subunit results in altered function of the SWI/SNF complex that leads to deregulated expression of genes such as Sox2 in SS (1).

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

APPLICATIONS KEY WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation IF: Immunofluorescence F: Flow Cytometry E-P: ELISA-Peptide

CROSS-REACTIVITY KEY Ht human Mt: mouse R: rat Hm: hamster Mk: monkey Mit: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Co: C. elegans Hr: horse All: all species expected

IMPORTANT: For primary antibodies recommended for western blotting applications, we recommend incubating the membrane with diluted antibody at 4°C with gentle shaking overnight. Please refer to the western blot protocol found on the product web page for the antibody-specific diluent recommendation.

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