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## Siva-1 Antibody



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<b>Applications:</b> WB, IP	Reactivity: H	Sensitivity: Endogenous	<b>MW (kDa):</b> 19	Source: Rabbit	UniProt ID: #O15304	Entrez-Gene Id: 10572	
Product Usage Information	Ap	Application			Dilution		
	We	Western Blotting			1:1000		
	lmı	Immunoprecipitation			1:50		
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 $\mu$ g/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.					
Specificity / Sensitiv	,	Siva-1 Antibody recognizes endogenous levels of total Siva-1 protein. This antibody does not cross-react with Siva-2. This antibody cross-reacts with a protein of unknown origin at ~70 kDa.					
Source / Purification	-	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro71 of human Siva-1 protein. Antibodies are purified by protein A and peptide					

**Background** 

First identified as a pro-apoptotic protein that binds the cytoplasmic tail of the TNF receptor superfamily member CD27 (1), Siva-1 also binds several other TNFR family members including glucocorticoid-induced tumor necrosis factor receptor (GITR) and OX40 (1-3), as well as anti-apoptotic Bcl-2 family members Bcl-xL and Bcl-2 (4,5). Siva-1 is composed of a central death domain homology region, a C-terminal box-B-like ring finger followed by a zinc finger-like domain, and a unique N-terminal amphipathic helical region (SAH) (1,4). Studies have demonstrated that Siva-1 has the ability to induce cell death via both the extrinsic and intrinsic apoptotic pathways (1-8). The SAH domain of Siva-1 is responsible for the inhibition of the prosurvival activities of Bcl-xL and Bcl-2, leading to caspase-mediated cell death (4,5,8). Siva-1 plays a role in T cell signaling and homeostasis by inhibiting NF-kB activity, also resulting in apoptotic cell death (7,9). An alternative splice variant of Siva-1, Siva-2, lacks part of the SAH and death domains and is less effective at inducing apoptosis (1,2,5,8). Studies in xenografts have shown that down-regulation of Siva-1 inhibits tumorigenesis in response to p53 activation (10). Down-regulation of Siva-1 may also play a role in tumor metastasis through its regulation of the epithelial-mesenchymal transition (EMT) and cell migration (11). Overexpression of Siva-1 is implicated in several pathological conditions including acute ischemic injury (12) and Coxsackievirus infection (13).

## **Background References**

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- 3. Spinicelli, S. et al. (2002) Cell Death Differ 9, 1382-4.
- 4. Xue, L. et al. (2002) Proc Natl Acad Sci U S A 99, 6925-30.
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affinity chromatography.

- 6. Cao, C. et al. (2001) J Biol Chem 276, 11465-8.
- 7. Gudi, R. et al. (2006) Oncogene 25, 3458-62.
- 8. Py, B. et al. (2004) J Immunol 172, 4008-17.
- 9. Hench, V.K. and Su, L. (2011) BMC Immunol 12, 54.
- 10. Du, W. et al. (2009) Cell Death Differ 16, 1493-504.
- 11. Li, N. et al. (2011) Proc Natl Acad Sci U S A 108, 12851-6.
- 12. Padanilam, B.J. et al. (1998) Kidney Int 54, 1967-75.
- 13. Henke, A. et al. (2000) J Virol 74, 4284-90.

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

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key WB: Western Blotting IP: Immunoprecipitation

3/23/24, 1:35 PM

**Cross-Reactivity Key** 

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**Limited Uses** 

Siva-1 Antibody (#12532) Datasheet Without Images Cell Signaling Technology

H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected

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