## S100A4 (D9F9D) Rabbit mAb S100A4 (D9F9D) Rabbit mAb



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## For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W. IP. IHC-P	Reactivity: H M	Sensitivity: Endogenous	<b>MW (kDa):</b> 12	Source/Isotype: Rabbit IgG	UniProt ID: #P26447	Entrez-Gene Id: 6275	
w, ii, iiic i		Endogenous	12	Nubble 190	1120447	0275	
<b>Product Usage</b>		Application			Dil	lution	
Information		Western Blotting			1:1	000	
		Immunoprecipitation			1:5	50	
		Immunohistochemistr	ry (Paraffin)		1:8	300	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.			ol and less than		
		For a carrier free (BSA	and azide free) ver	sion of this product see	product #48842.		
Specificity/Sen	sitivity	S100A4 (D9F9D) Rabbit mAb recognizes endogenous levels of total S100A4 protein.					
Source / Purific	ation	Monoclonal antibody i residues surrounding	s produced by imm Ala54 of human S1	nunizing animals with a s 00A4 protein.	synthetic peptide corresponding to		
Background		Despite their relatively variety of cellular proc differentiation. To date filaggrin, repetin, S100 protein family. Interest genomic instability. Re aberrant S100 protein responses in various ti	small size (8-12 kD esses, such as cell e, 25 members hav P, and S100Z, maki tingly, 14 S100 gen search studies hav expression and car issue types but are	ba) and uncomplicated a growth and motility, cell e been identified, includi ing it the largest group in es are clustered on hum e demonstrated that sig neer progression. S100 p also involved in neurona	l architecture, S100 proteins regulate a ell cycle progression, transcription, and uding S100A1-S100A18, trichohyalin, p in the EF-hand, calcium-binding uman chromosome 1q21, a region of significant correlation exists between D proteins primarily mediate immune onal development (1-4).		
		Each S100 monomer b divalent cation in some homo- or heterodimer sometimes calcium-inc members show restric display unique protein signaling pathways. In receptors for extracellu	ears two EF-hand r e instances). Struct is that coordinate b dependent) manne ted tissue distribut i binding partners, addition to an intr ular ligands or are	notifs and can bind up to ural evidence shows that inding partner proximity r. Although structurally a ion, are localized in spec which suggests that eac acellular role, some S100 secreted and exhibit cyto	<ul> <li>&gt; two molecules of a</li> <li>&gt; S100 proteins form</li> <li>&gt; in a calcium-deper</li> <li>&gt; ind functionally sim</li> <li>&gt; ific cellular compari</li> <li>&gt; h plays a specific ro</li> <li>&gt; proteins have bee</li> <li>&gt; bkine-like activities (</li> </ul>	calcium (or other n antiparallel ndent (and ilar, individual tments, and le in various n shown to act as (1-4).	
		Research studies have it useful as a marker o types (7-10). S100A4 ex P63, nonmuscle myosi cytoplasm and extrace via interaction with dif as a neuroprotectant in	shown that S100A f tumor progressio xerts its function vi in IIA, α6β4 integrir Ilular space. Intrac ferent proteins. Re n the peripheral ne	4 is overexpressed in hig n (5,6) and may serve as a direct interaction with n, and liprin b1 (11-15). S ellular and extracellular searchers have recently rvous system (16,17).	hly metastatic canc a prognostic factor a number of proteir 100A4 is present in S100A4 both promc discovered that S10	ers, which makes in several cancer ns including P53, the nucleus, ote cell migration 0A4 also functions	
Background Re	ferences	1. Heizmann, C.W. et al 2. Donato, R. (2003) <i>M</i> . 3. Marenholz, I. et al. (2003) 4. Santamaria-Kisiel, L. 5. Ismail, N.I. et al. (200 6. Ismail, T.M. et al. (200 7. Rudland, P.S. et al. (200 9. Wang, L.Y. et al. (201 10. Kang, Y.G. et al. (201 11. Kriajevska, M.V. et al. 12. Takenaga, K. et al. (13) Kriajevska, M. et al.	I. (2002) Front Bios icrosc Res Tech 60, 2004) Biochem Bio, et al. (2006) Bioch 08) Cancer Cell Int 010) J Biol Chem 28 2000) Cancer Res 60 111) World J Gastroo 2) Appl Immunohis 012) J Surg Oncol 10 al. (1994) J Biol Che (1994) J Cell Biol 12 . (2002) J Biol Chem	ci 7, d1356-68. 540-51. ohys Res Commun 322, 7 em J 396, 201-14. 8, 12. 5, 914-22. 0, 1595-603. enterol 17, 69-78. stochem Mol Morphol 20 95, 119-24. m 269, 19679-82. 4, 757-68.	1111-22. 1, 71-6.		

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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	W: Western Blotting IP: Immunoprecipitation IHC-P: Immunohistochemistry (Paraffin)
Cross-Reactivity Key	H: Human M: Mouse
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