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## Phospho-PZR (Tyr263) Antibody



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Applications: WB, IP	Reactivity: H M R B	Sensitivity: Endogenous	<b>MW (kDa):</b> 30-50	Source: Rabbit	<b>UniProt ID:</b> #O95297	Entrez-Gene Id: 9019	
Product Usage Information	Ap	Application			Dilution		
	We	Western Blotting			1:1000		
	Imr	nunoprecipitation		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	,	Phospho-PZR (Tyr263) Antibody recognizes endogenous levels of PZR protein only when phosphorylated at Tyr263. This antibody may cross-react with other activated receptor tyrosine kinases					
Source / Purification	resi	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Tyr263 of human PZR protein. Antibodies are purified by protein A and peptide affinity chromatography.					
Background		PZR (Protein zero related) is an immunoglobulin superfamily protein that specifically binds the tyrosine phosphatase SHP-2 through its intracellular immunoreceptor tyrosine-based inhibitory motifs (ITIMs) (1,2).					

phosphatase SHP-2 through its intracellular immunoreceptor tyrosine-based inhibitory motifs (ITIMs) (1,2). PZR is phosphorylated by c-Src, c-Fyn, c-Lyn, Csk, and c-Abl (3). PP1, a Src family kinase inhibitor, inhibits PZR phosphorylation (4,5). There are three alternatively spliced isoforms, designated as PZR, PZRa, and PZRb; both PZRa and PZRb lack ITIMs (6,7). PZR is the main receptor of ConA and has an important role in cell signaling via c-Src (4). PZR is expressed in many cell types and is localized to cell contacts and intracellular granules in BAECs and mesothelioma (REN) cells. PZR has been implicated as a cell adhesion protein that may be involved in SHP-2-dependent signaling at interendothelial cell contacts (3). Hypertyrosine phosphorylation of PZR was observed during embryogenesis in a mouse model of Noonan syndrome (8).

**Background References** 

- 1. Zhao, Z.J. and Zhao, R. (1998) J Biol Chem 273, 29367-72.
- 2. Zhao, R. and Zhao, Z.J. (2000) J Biol Chem 275, 5453-9.
- 3. Kusano, K. et al. *Endothelium* 15, 127-36.
- 4. Zhao, R. et al. (2002) *J Biol Chem* 277, 7882-8.
- 5. Zhao, R. et al. (2003) J Biol Chem 278, 42893-8.
- 6. Zannettino, A.C. et al. (2003) Biochem J 370, 537-49.
- 7. Zhao, R. and Zhao, Z.J. (2003) Biochem Biophys Res Commun 303, 1028-33.
- 8. Eminaga, S. and Bennett, A.M. (2008) *J Biol Chem* 283, 15328-38.

**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

Cross-Reactivity Key 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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