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# 36-2043: Anti-Peroxiredoxin 4 (Prognostic Marker for Lung SqCC) Monoclonal Antibody (Clone: CPTC-PRDX4-2)

Clonality :	Monoclonal
Clone Name :	CPTC-PRDX4-2
Application :	ELISA
Reactivity :	Human
Gene :	PRDX4
Gene ID :	10549
Uniprot ID :	Q13162
Alternative Name :	Antioxidant enzyme AOE372; EC 1.11.1.15; Thioredoxin dependent peroxide reductase A0372; TRANK
Isotype :	Mouse IgG2b, kappa
Immunogen Information	: Recombinant full-length human PRDX4 protein

## Description

The peroxiredoxin (PRX) family comprises six antioxidant proteins, PRX I, II, III, IV, V and VI, which protect cells from reactive oxygen species (ROS) by preventing the metal-catalyzed oxidation of enzymes. The PRX proteins primarily utilize thioredoxin as the electron donor for antioxidation, although they are fairly promiscuous with regard to the hydroperoxide substrate. In addition to protection from ROS, peroxiredoxins are also involved in cell proliferation, differentiation and gene expression. PRX I, II, IV and VI show diffuse cytoplasmic localization, while PRX III and V exhibit distinct mitochondrial localization. The human PRX IV gene is expressed in many tissues. It exists as a precursor protein, which is only detected in testis, and aprocessed secreted form. PRX IV is highly expressed in lung cancer and is necessary for the promotion of lung cancer in vitro. Studies have demonstrated that PRX IV positive expression is significantly correlated with recurrences and shorter disease-free survival in patients with early-stage lung squamous cell carcinoma, and therefore can be used as a prognostic marker in lung squamous cell carcinoma.

### **Product Info**

Amount :	20 μg / 100 μg
Content :	$200\mu$ g/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months.

### **Application Note**

ELISA (For coating, order Ab without BSA);



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kDa		NR	R	
250	-			
150 —		-		
100				
75	-			2ug loading
50	-		-	NR=Non- reduced
37	-			R=reduced
25	=		-	
15				
10	-			

Fig.1: SDS-PAGE Analysis Purified Peroxiredoxin 4 Monoclonal Antibody (CPTC-PRDX4-2). Confirmation of Purity and Integrity of Antibody.