

## Product datasheet for **AP26437PU-N**

### Cox4i1 pSer58 Rabbit Polyclonal Antibody

#### Product data:

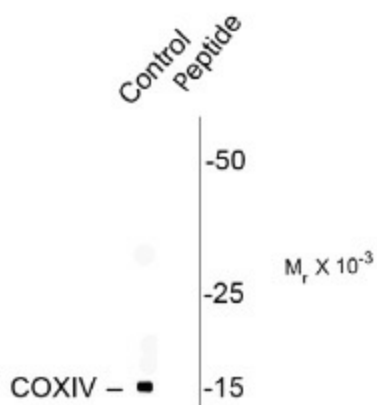
Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	<b>Western blot:</b> 1/1000.
Reactivity:	Mouse, Rat
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	Phosphopeptide corresponding to amino acid residues surrounding the phospho- Ser 58 of mouse COXIV protein
Specificity:	Specific for the ~17k COXIV-1 protein phosphorylated at Ser58 . Immunolabeling is blocked by the phospho-peptide used as antigen but not by the corresponding dephospho-peptide.
Formulation:	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol State: Liquid Ig fraction
Purification:	Affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	cytochrome c oxidase subunit IV isoform 1
Database Link:	<a href="#">Entrez Gene 12857 Mouse P19783</a>
Background:	COX, also known as cytochrome c oxidase, has 12 subunits that make up the transmembrane mitochondrial protein. Subunit IV has two isoforms; COXIV-1 and COXIV-2 (Huttermann et al., 2001). COXIV-1 is expressed ubiquitously while COXIV-2 is highly expressed in adult lung and low levels in brain and heart (Huttermann et al., 2001). Phosphorylation of amino acid residue ser58 of the COXIV-1 protein is a PKA-dependent regulation of COX and plays an important role in metabolism and CREB cycle activation (Acin- Perez et al., 2011).



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**Synonyms:** Cytochrome c oxidase polypeptide IV, COX IV-1, COX4I1, COX4

**Product images:**



Acin-Perez R, Gatti D, Bai Y, Manfredi D (2011) Protein Phosphorylation and Prevention of Cytochrome Oxidase Inhibition by ATP: Coupled Mechanisms of Energy Metabolism Regulation. *Cell Metabolism* 13, 712-719. H? ttermann M, Kadenbach B, and Grossman LI (2001) Mammalian subunit IV isoforms of cytochrome c oxidase. *Gene* 267, 111-123.