

Polyclonal Anti-SDHC Antibody

Catalog Number: PA1839

Description

Gene Name	succinate dehydrogenase complex, subunit C, integral membrane protein, 15kDa
Recommended Protein Name	Succinate dehydrogenase cytochrome b560 subunit, mitochondrial
Lot No.	0181212c033987
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human, rat Predicted to work with: mouse
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human SDHC(35-50aa KEEMERFWNKNIGSNR), different from the related mouse and rat sequences by three amino acids.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu, Rat	Ms	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1µg/ml	Hu, Rat	Ms	By Heat

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P).

Background

SDHC(succinate dehydrogenase complex, subunit C, integral membrane protein, 15kDa) also known as SDH3, SUCCINATE DEHYDROGENASE CYTOCHROME b. The SDHC gene contains 6 exons. Oostveen et al. (1995) found that in fact it was protein from the bovine SDH3 gene (encoding 1 of the 2 integral membrane proteins) that complemented the hamster mutation. The authors localized the human SDH3 gene to the short arm of chromosome one, within 1 to 2 Mb from the centromere. Additionally, the authors stated that Southern analyses of human genomic DNA suggested that there are multiple SDH3 genes or pseudogenes. Elbehti-Green et al. (1998) confirmed the assignment of the SDHC gene to 1q21 by FISH. Baysal et al. (2004) described a family with PGL3 in which an 8,372-bp deletion in the SDHC gene was transmitted both maternally and paternally, without evidence of genomic imprinting.

Reference

1. Baysal, B. E., Willett-Brozick, J. E., Filho, P. A. A., Lawrence, E. C., Myers, E. N., Ferrell, R. E. An Alu-mediated partial SDHC deletion causes familial and sporadic paraganglioma. *J. Med. Genet.* 41: 703-709, 2004.
2. Elbehti-Green, A., Au, H. C., Mascarello, J. T., Ream-Robinson, D., Scheffler, I. E. Characterization of the human SDHC gene encoding one of the integral membrane proteins of succinate-quinone oxidoreductase in mitochondria. *Gene* 213: 133-140, 1998.
3. Oostveen, F. G., Au, H. C., Meijer, P.-J., Scheffler, I. E. A Chinese hamster mutant cell line with a defect in the integral membrane protein C(II-3) of complex II of the mitochondrial electron transport chain. *J. Biol. Chem.* 270: 26104-26108, 1995.