Datasheet for ABIN5066870

# anti-SCNN1A antibody (AA 46-68) (HRP)

3 Images

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## Overview

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|---|---|
| Quantity: | 100 µg |
| Target: | SCNN1A |
| Binding Specificity: | AA 46-68 |
| Reactivity: | Rat |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This SCNN1A antibody is conjugated to HRP |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC) |

## Product Details

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| Immunogen: | Synthetic peptide from the N-terminal of Rat ENaC alpha (aa. 46-68) |
| Clone: | 2G4 |
| Isotype: | IgG2b |
| Specificity: | Detects ~85 kDa. |
| Cross-Reactivity: | Mouse, Rat |
| Purification: | Protein G Purified |

## Target Details

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|---|---|
| Target: | SCNN1A |
| Alternative Name: | ENaC alpha (SCNN1A Products) |

## Target Details

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| Background: | The Epithelial Sodium Channel (ENaC) is a membrane ion channel permeable to Na+ ions. It is located in the apical plasma membrane of epithelia in the kidneys, lung, colon, and other tissues where it plays a role in trans epithelial Na+-ion transport (1). Specifically Na+ transport via ENaC occurs across many epithelial surfaces, and plays a key role in regulating salt and water absorption (2). ENaCs are composed of three structurally related subunits that form a tetrameric channel, alpha, beta, and gamma. The expression of its alpha and beta subunits is enhanced as keratinocytes differentiate (3, 4). The beta and gamma-ENaC subunits are essential for edema fluid to exert its maximal effect on net fluid absorption by distal lung epithelia(5). And it has been concluded that the subunits are differentially expressed in the retina of mice with ocular hypertension, therefore the up-regulation of alpha-ENaC proteins could serve as a protection mechanism against elevated intraocular pressure (6). |
| Gene ID: | 25122 |
| NCBI Accession: | NP_113736 |
| UniProt: | Q6IRJ1 |

## Application Details

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| Application Notes: | • WB (1:1000)<br>• IHC (1:150)<br>• optimal dilutions for assays should be determined by the user. |
| Comment: | A 1:1000 dilution of ABIN5066870 was sufficient for detection of ENaC alpha in 15 µg of Mouse whole kidney lysate by ECL immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Concentration: | 1 mg/mL |
| Buffer: | PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |

## Handling

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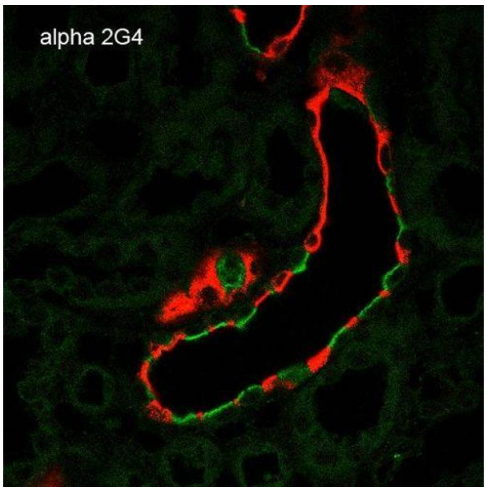
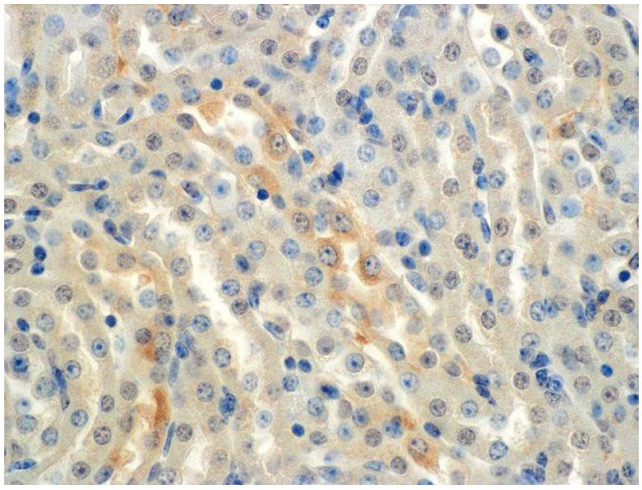
|---|---|
| Storage: | 4 °C |
| Storage Comment: | Conjugated antibodies should be stored at 4°C |

## Images



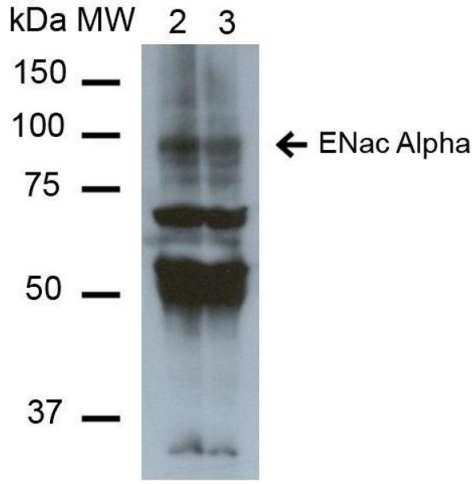

**Immunohistochemistry**

**Image 1.** Immunohistochemistry analysis using Mouse Anti-ENaC alpha Monoclonal Antibody, Clone 2G4 . Tissue: Kidney. Species: Rat. Fixation: Paraffin-embedded formalin-fixed. Primary Antibody: Mouse Anti-ENaC alpha Monoclonal Antibody at 1:100. Secondary Antibody: Goat Anti-Mouse ATTO 488 (green). Localization: Intercalated cells. Aquaporin 2 Antibody staining in red.



**Immunohistochemistry**

**Image 2.** Immunohistochemistry analysis using Mouse Anti-ENaC alpha Monoclonal Antibody, Clone 2G4 . Tissue: Kidney (cortex). Species: Mouse. Primary Antibody: Mouse Anti-ENaC alpha Monoclonal Antibody at 1:150. Localization: Collecting duct principal cells. Magnification: 60X.




**Western Blotting**

**Image 3.** Western Blot analysis of Mouse Whole kidney homogenates showing detection of ~85kDa ENaC alpha protein using Mouse Anti-ENaC alpha Monoclonal Antibody, Clone 2G4 . Lane 1: Molecular Weight Ladder (MW). Lane 2: Low-salt diet. Lane 3: Normal-salt diet. Load: 20 µg. Primary Antibody: Mouse Anti-ENaC alpha Monoclonal Antibody at 1:1000. Predicted/Observed Size: ~85kDa.