

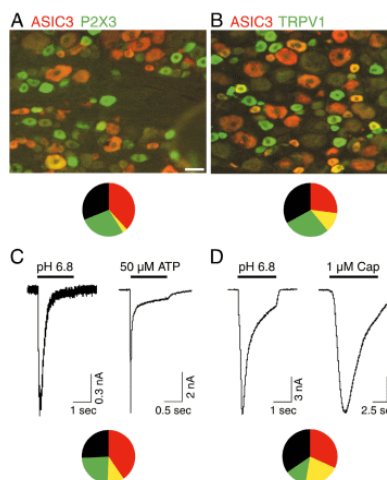
Product datasheet for GP14105-50

Asic3 Guinea Pig Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Reactivity:	Rat
Host:	Guinea Pig
Clonality:	Polyclonal
Formulation:	State: Serum
Gene Name:	acid sensing ion channel subunit 3
Database Link:	Entrez Gene 286920 Rat
Synonyms:	SLNAC1, TNAC1

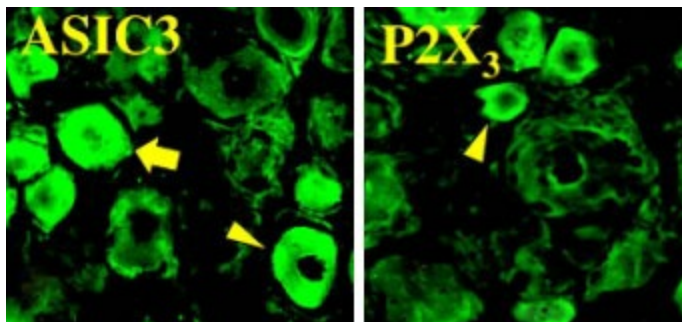
Product images:



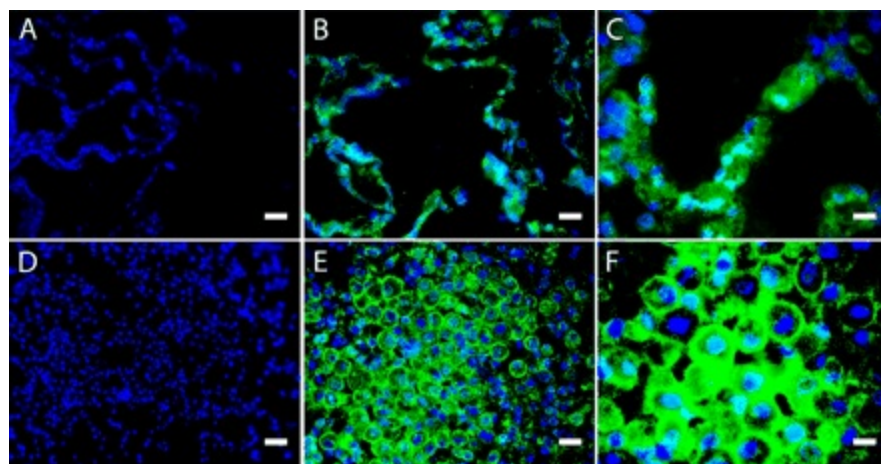
ASIC3 expression compared to other nociceptive ion channels. DRG sections double-labeled for ASIC3 (red) and either P2X3 (green, A) or TRPV1 (green, B); double-labeled cells are yellow or orange. Circle charts show the relative distribution of the three receptors among all DRG neurons. ASIC3 and P2X3 expression overlapped in only 4% of neurons, while some 35% of ASIC3-positive neurons also express TRPV1. The rare cells positive for both ASIC3 and P2X3 were large (eg. cell at lower left in A). 1406 cells counted for A; 995 for B. C, D, electrophysiological recordings reveal a qualitatively similar expression pattern for currents conforming to ASIC3, P2X3, or TRPV1. The cell that generated the currents in C counts as a co-expressor of ASIC3 and P2X3, fitting into the yellow bin in the circle plot. The cell in D is a co-expressor of ASIC3 and TRPV1. Cells were counted positive if they had at least 0.3 nA of current in response to pH 6.8 (ASIC3+), 50 μM ATP (P2X3+; transient current only), or 1 μM capsaicin (TRPV1). 182 cells recorded for C; 169 for D.



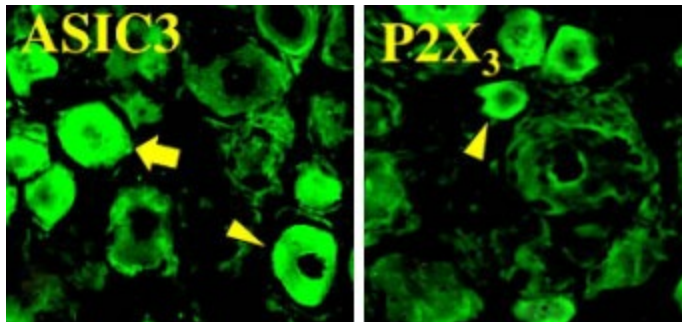
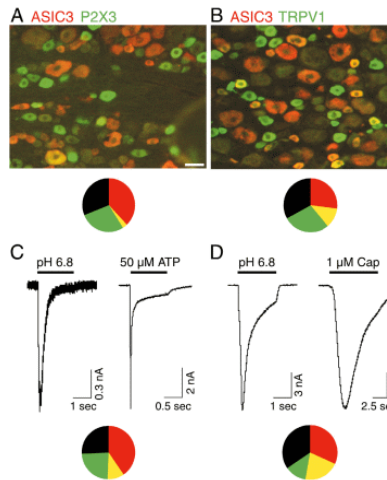
View online »



ASIC3 (Dilution 1:10) and P2X3 (Dilution 1:500) staining of rat Dorsal Root Ganglia (DRGs) of cisplatin-treated animals. After dilution in 0.1 M phosphate-buffered saline (PBS) containing 1.5% normal goat serum and 0.3% Triton X-100 (Sigma), DRG sections were incubated with either guinea pig polyclonal antiserum against synthetic rat ASIC3 and rabbit polyclonal antiserum against synthetic rat P2X3 (1:500; NeuroMics). The sections for ASIC3 were reacted with reagents for 2 days at room temperature and others at 4°C. After being rinsed with 0.1 M PBS, the sections were reacted in PBS with fluorescein-isothiocyanate (FITC)-conjugated goat anti-guinea pig or - rabbit IgG antibody (Vector Laboratories, Burlingame, CA, USA) at a concentration of 1:100. After being rinsed with 0.1 M PBS, the sections were cover-slipped in mounting medium (Immunon, Pittsburgh, PA, USA) and examined under a fluorescence microscope equipped with a digital camera

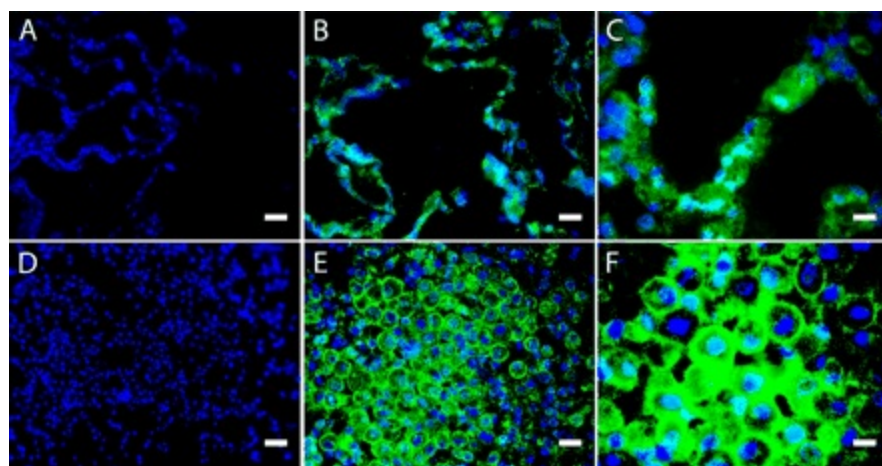


Detection of ASIC3 expression in normal and CF human lung tissues by immunofluorescence microscopy. Normal (top panels A-C) and CF human lung sections (bottom panels D-F) were labeled with a specific antibody against ASIC3 (green channel) and the DNA-selective Hoechst dye (blue channel). A and D, normal and CF human lung sections imaged following incubation with the mixture of anti-ASIC3 antibody and immunopeptide. Shown are normal (B) and CF (E) alveolar structures at a small magnification. ASIC3 expression was detected in both types I and II alveolar cells. Shown are normal (C) and CF (F) alveolar structures at a large magnification. Scale bars equal 10 μm in A, B, D, and E and 20 μm in C and F. These representative images were from 11 sections of four CF lungs.



ASIC3 expression compared to other nociceptive ion channels. DRG sections double-labeled for ASIC3 (red) and either P2X3 (green, A) or TRPV1 (green, B); double-labeled cells are yellow or orange. Circle charts show the relative distribution of the three receptors among all DRG neurons. ASIC3 and P2X3 expression overlapped in only 4% of neurons, while some 35% of ASIC3-positive neurons also express TRPV1. The rare cells positive for both ASIC3 and P2X3 were large (eg. cell at lower left in A). 1406 cells counted for A; 995 for B. C, D, electrophysiological recordings reveal a qualitatively similar expression pattern for currents conforming to ASIC3, P2X3, or TRPV1. The cell that generated the currents in C counts as a co-expressor of ASIC3 and P2X3, fitting into the yellow bin in the circle plot. The cell in D is a co-expressor of ASIC3 and TRPV1. Cells were counted positive if they had at least 0.3 nA of current in response to pH 6.8 (ASIC3+), 50 μM ATP (P2X3+; transient current only), or 1 μM capsaicin (TRPV1). 182 cells recorded for C; 169 for D.

ASIC3 (Dilution 1:10) and P2X3 (Dilution 1:500) staining of rat Dorsal Root Ganglia (DRGs) of cisplatin-treated animals. After dilution in 0.1 M phosphate-buffered saline (PBS) containing 1.5% normal goat serum and 0.3% Triton X-100 (Sigma), DRG sections were incubated with either guinea pig polyclonal antiserum against synthetic rat ASIC3 and rabbit polyclonal antiserum against synthetic rat P2X3 (1:500; Neuromics). The sections for ASIC3 were reacted with reagents for 2 days at room temperature and others at 4°C. After being rinsed with 0.1 M PBS, the sections were reacted in PBS with fluorescein-isothiocyanate (FITC)-conjugated goat anti-guinea pig or - rabbit IgG antibody (Vector Laboratories, Burlingame, CA, USA) at a concentration of 1:100. After being rinsed with 0.1 M PBS, the sections were cover-slipped in mounting medium (Immunon, Pittsburgh, PA, USA) and examined under a fluorescence microscope equipped with a digital camera



Detection of ASIC3 expression in normal and CF human lung tissues by immunofluorescence microscopy. Normal (top panels A-C) and CF human lung sections (bottom panels D-F) were labeled with a specific antibody against ASIC3 (green channel) and the DNA-selective Hoechst dye (blue channel). A and D, normal and CF human lung sections imaged following incubation with the mixture of anti-ASIC3 antibody and immunopeptide. Shown are normal (B) and CF (E) alveolar structures at a small magnification. ASIC3 expression was detected in both types I and II alveolar cells. Shown are normal (C) and CF (F) alveolar structures at a large magnification. Scale bars equal 10 μm in A, B, D, and E and 20 μm in C and F. These representative images were from 11 sections of four CF lungs.