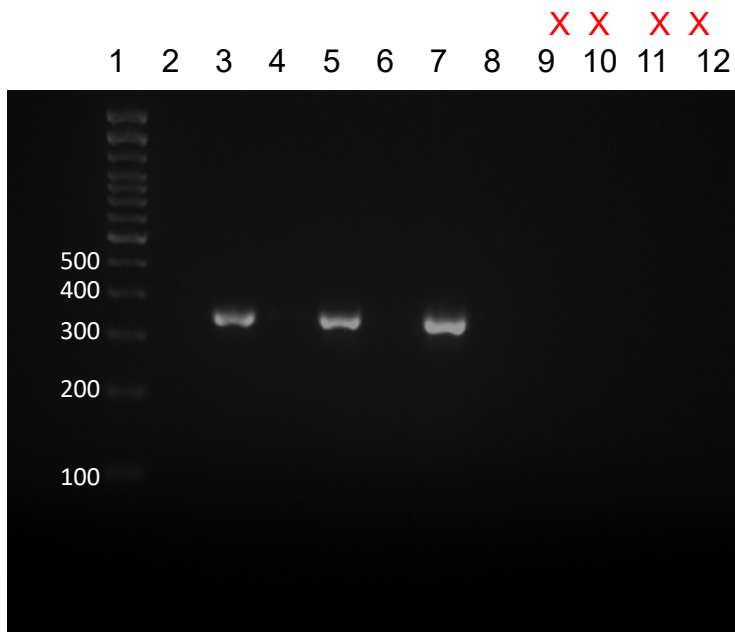


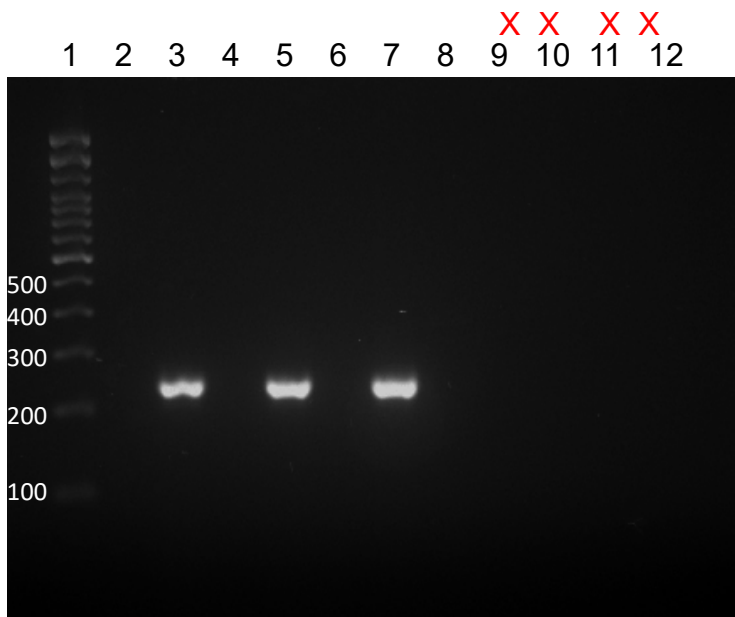
Raw gel images from Figure 2A



Orai1

Orai1	Product Size, bp
Primer Pair Sequence	
F: 5'-ACGTCCACAACCTCAACTCC-3'	357 bp
R: 5'-ACTGTCGGTCCGTCTTATGG-3'	

PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light.



β -actin

β -actin	Product Size, bp
Primer Pair Sequence	
F: 5'-AGTGTGACGTTGACATCCGT-3'	244 bp
R: 5'-GACTCATCGTACTCTGCTT-3'	

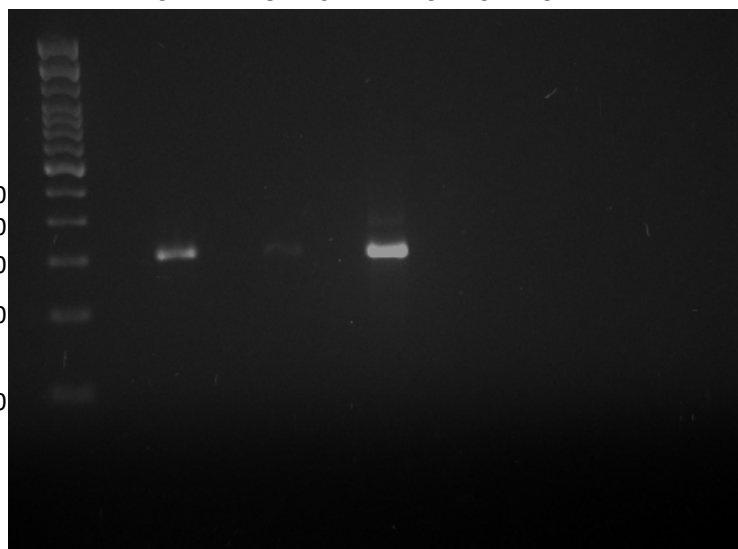
PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light.

1. Molecular weight marker
2. Blank
3. Pulmonary artery + reverse transcriptase
4. Pulmonary artery - reverse transcriptase
5. Mesenteric artery + reverse transcriptase
6. Mesenteric artery - reverse transcriptase
7. Brain tissue + reverse transcriptase
8. Brain tissue - reverse transcriptase
9. Blank
10. Blank
11. Blank
12. Blank

Raw gel images from Figure 2A

X X X X

1 2 3 4 5 6 7 8 9 10 11 12

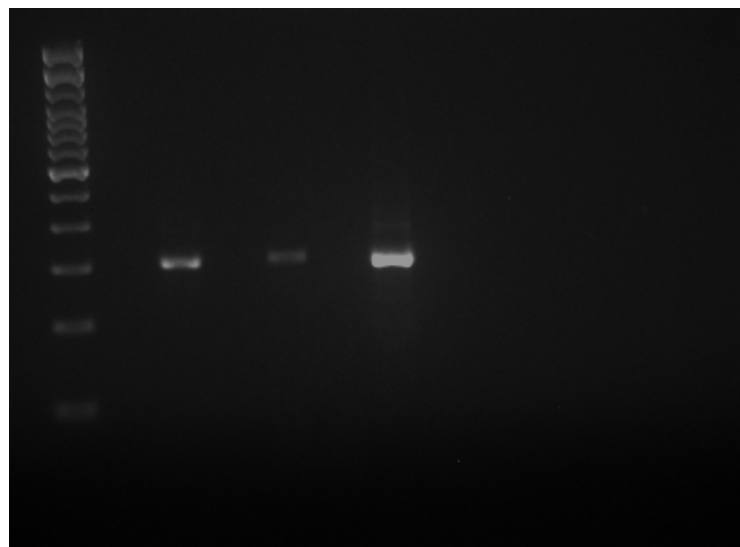


ASIC1: Even Loading

ASIC1 Primer Pair Sequence	Product Size, bp
F: 5'-GCCTATGAGATCGCAGGG-3'	305 bp
R: 5'-AAAGTCCTCAAACGTGCCTC-3'	

PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light. ASIC1 transcript Fig. 2b (even loading).

1 2 3 4 5 6 7 8 9 10 11 12



Uneven Loading

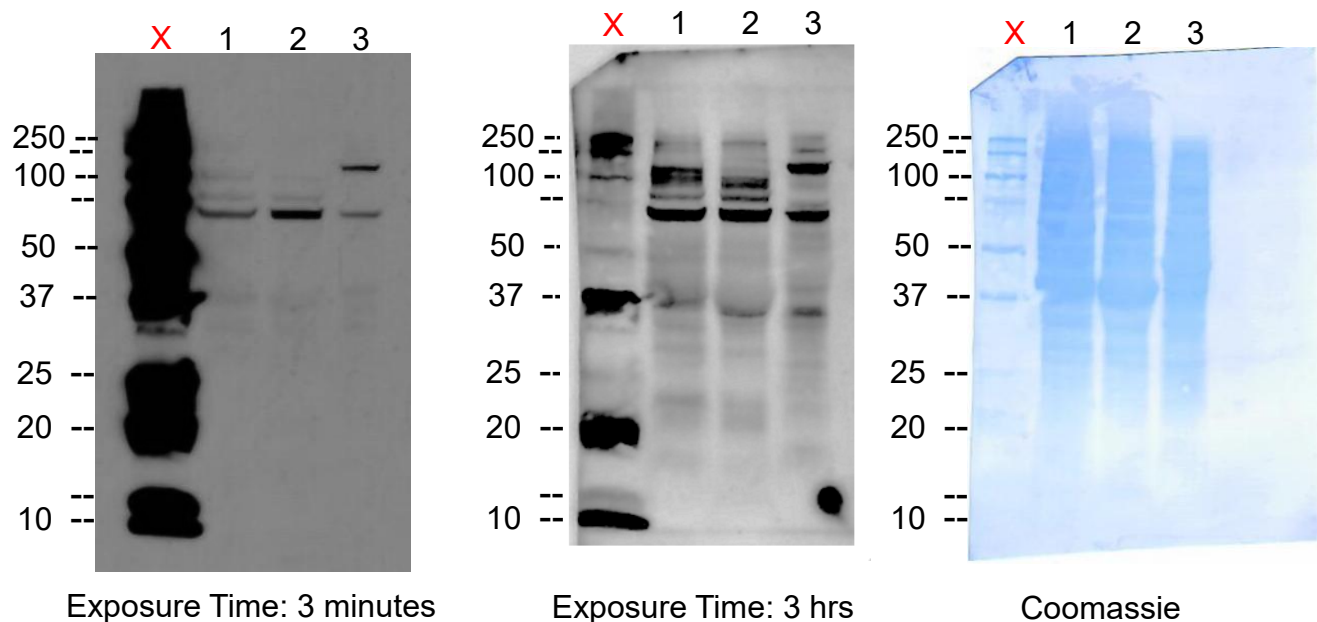
(Gel shown for reviewers, not shown in manuscript)

Uneven loading of ASIC1 transcript from above. Pulmonary and brain samples were loaded with 5 μ l cDNA while mesenteric was loaded with 15 μ l cDNA. Shown here to help visualize mesenteric band.

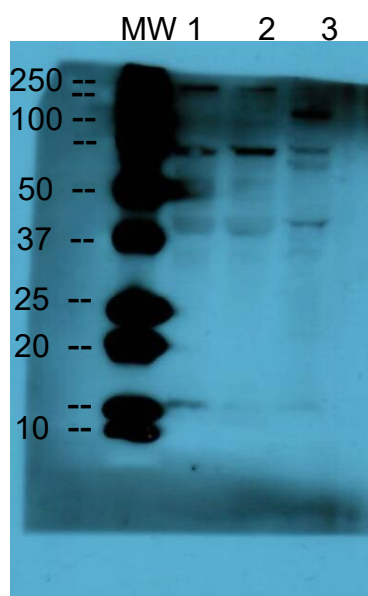
1. Molecular weight marker
2. Blank
3. Pulmonary artery + reverse transcriptase
4. Pulmonary artery - reverse transcriptase
5. Mesenteric artery + reverse transcriptase
6. Mesenteric artery - reverse transcriptase
7. Brain tissue + reverse transcriptase
8. Brain tissue - reverse transcriptase
9. Blank
10. Blank
11. Blank
12. Blank

Raw blot images from Figure 2B –ORAI1

Anti-Orai1 (Proteintech #14443-1-AP) 1.5 hrs @ 1:300; expected MW 35-44 kDa



Anti-Orai1 (Alomone #ACC-0621:100; overnight @ 1:100; expected MW not reported)



(Gel shown for reviewers, not shown in manuscript)

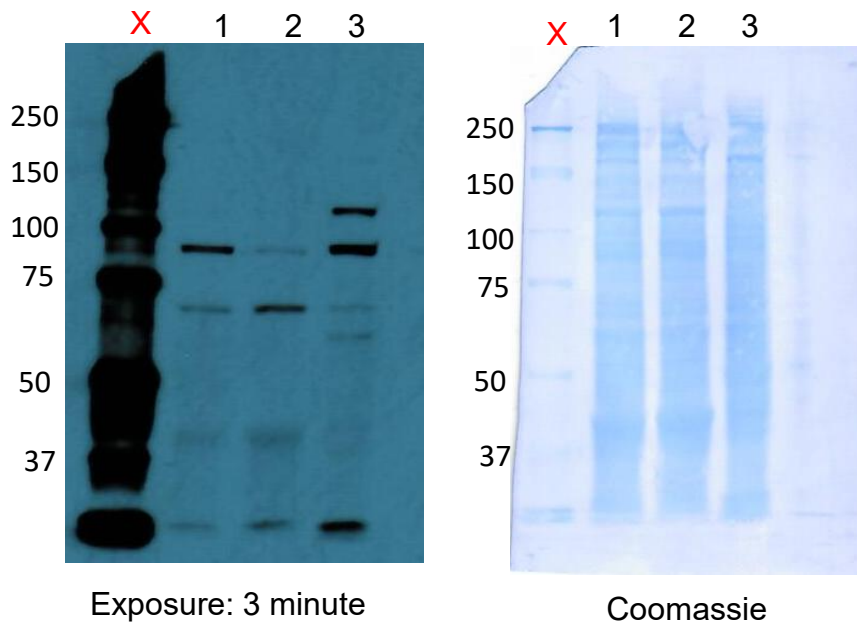
1. Pulmonary artery
2. Mesenteric artery
3. Brain tissue

Western blots were incubated with -horseradish peroxidase, followed by chemiluminescence labeling. Proteins were detected by exposing the blot to chemiluminescence-sensitive film. Blots were then stained with Coomassie blue to use as loading control.

Exposure Time: 1 minutes

Raw western blot images from Figure 2B – ASIC1

Anti-ASIC1 (Millipore: AB5674P) 48 hrs @ 1:500; reported MW ~60 and ~100 kDa



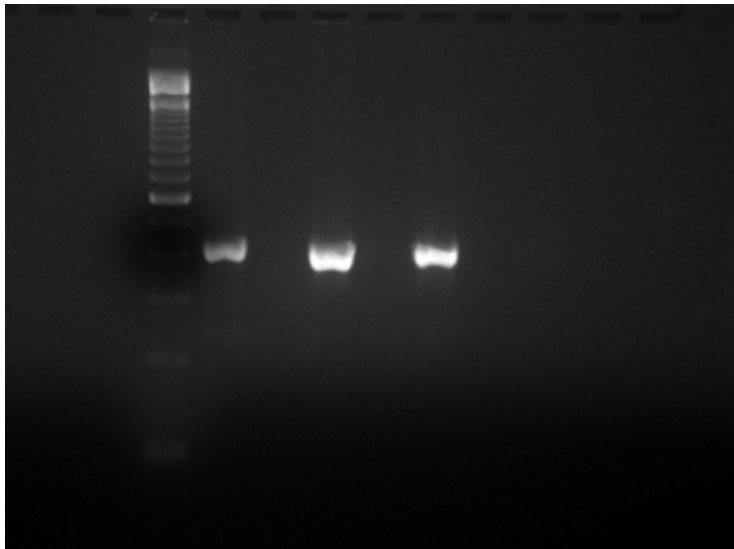
1. Pulmonary artery
2. Mesenteric artery
3. Brain tissue

Western blots were incubated with -horseradish peroxidase, followed by chemiluminescence labeling. Proteins were detected by exposing the blot to chemiluminescence-sensitive film. Blots were then stained with Coomassie blue to use as loading control.

Raw gel images from Figure S1B

X X X X

1 2 3 4 5 6 7 8 9 10 11 12



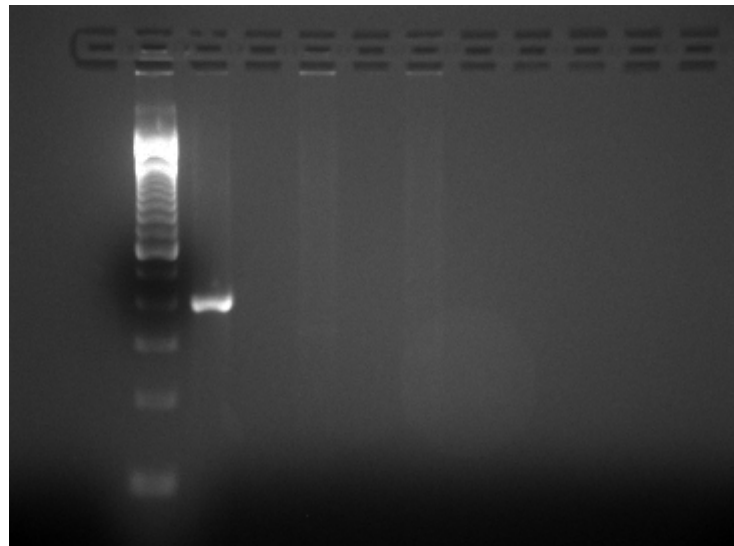
Smooth Muscle α -actin (SMA)

SMA	Product Size, bp
Primer Pair Sequence	
F: 5'-ACTGCTGCTTCCTCTTCTTC-3'	415 bp
R: 5'-GGCCAGCTTCGTCATACTCC-3'	

PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light.

X X X X

1 2 3 4 5 6 7 8 9 10 11 12



calcitonin gene-related peptide (CGRP)

CGRP	Product Size, bp
Primer Pair Sequence	
F: 5'-TTCTCCCCTTTCCTGGTTG-3'	390 bp
R: 5'-CTGGGGCTGTTATCTGTTCA-3'	

PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light.

1. Blank
2. Molecular weight marker
3. Brain tissue + reverse transcriptase
4. Brain tissue - reverse transcriptase
5. Pulmonary VSMC + reverse transcriptase
6. Pulmonary VSMC - reverse transcriptase
7. Mesenteric VSMC+ reverse transcriptase
8. Mesenteric VSMC- reverse transcriptase
9. Blank
10. Blank
11. Blank
12. Blank

Raw gel image from Figure S1B

1 2 3 4 5 6 7 8 9 10 11 12

X X X X

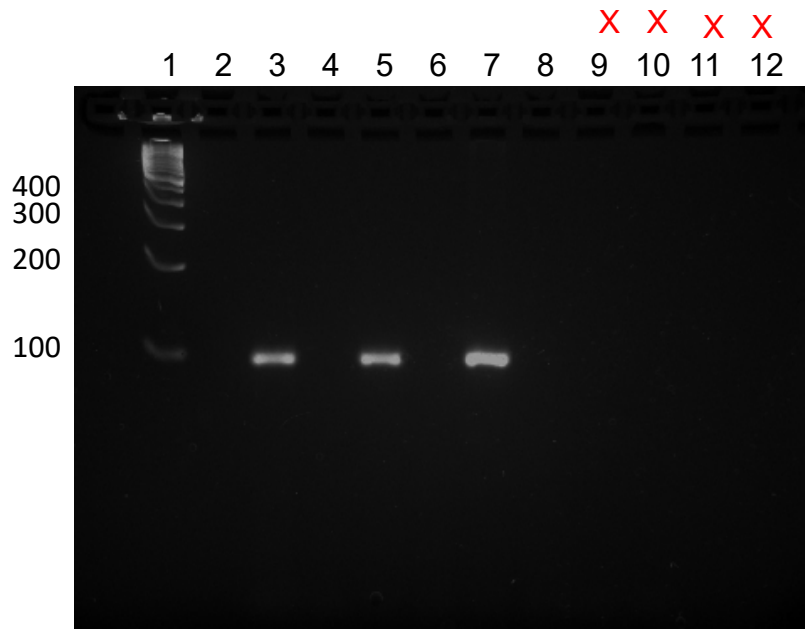
β-actin

β-actin	Product
Primer Pair Sequence	Size, bp
F: 5'-AGTGTGACGTTGACATCCGT-3'	244 bp
R: 5'-GACTCATCGTACTCCTGCTT-3'	

PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light. β-actin transcript Fig. S1B.

1. Blank
2. Molecular weight marker
3. Brain tissue + reverse transcriptase
4. Brain tissue - reverse transcriptase
5. Pulmonary VSMC + reverse transcriptase
6. Pulmonary VSMC - reverse transcriptase
7. Mesenteric VSMC+ reverse transcriptase
8. Mesenteric VSMC- reverse transcriptase
9. Blank
10. Blank
11. Blank
12. Blank

Raw gel and blot images from Figure S2



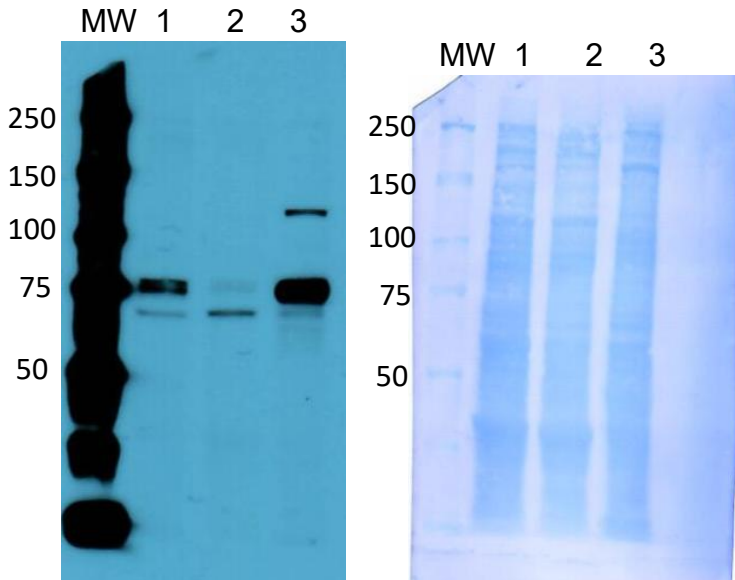
Stromal Interaction Molecule 1

STIM1	Product
Primer Pair Sequence	Size, bp
F: 5'-ATGCCAATGGTGATGTGGAT-3'	97 bp
R: 5'-CATGGAAGGTGCTGTGTTT-3'	

1. Molecular weight marker
2. Blank
3. Pulmonary artery + reverse transcriptase
4. Pulmonary artery - reverse transcriptase
5. Mesenteric artery + reverse transcriptase
6. Mesenteric artery - reverse transcriptase
7. Brain tissue + reverse transcriptase
8. Brain tissue - reverse transcriptase
9. Blank
10. Blank
11. Blank
12. Blank

PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light.

Rabbit anti-STIM1 (Abcam #ab108994, 1:500 overnight; predicted MW 77 kDa)



1. Pulmonary artery
2. Mesenteric artery
3. Brain tissue

Western blots were incubated with - horseradish peroxidase, followed by chemiluminescence labeling. Proteins were detected by exposing the blot to chemiluminescence-sensitive film. Blots were then stained with Coomassie blue to use as loading control.

Exposure time: 1 minute

Coomassie

Raw gel images from Figure S3

1 2 3 4 5 6 7 8 9 10 11 12

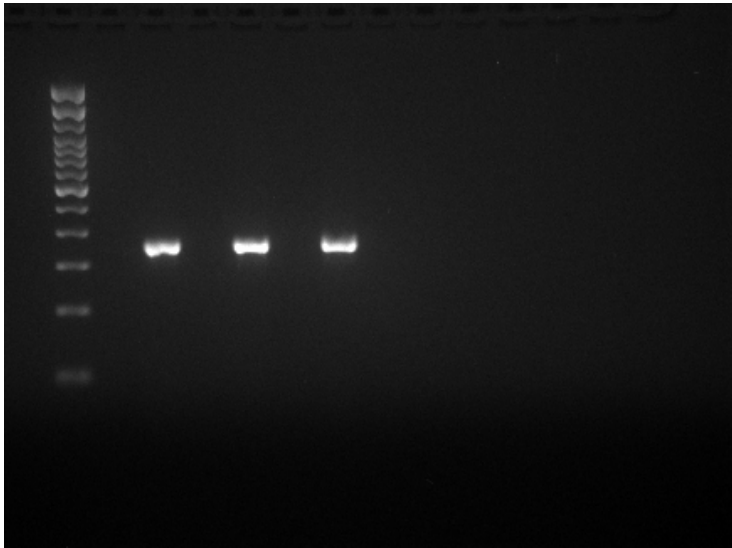
X X X X X X

Orai1

Orai1	Product
Primer Pair Sequence	Size, bp
F: 5'-ACGTCCACAACCTCAACTCC-3'	357 bp
R: 5'-ACTGTCGGTCCGTCTTATGG-3'	

PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light.

500
400
300
200
100



1 2 3 4 5 6 7 8 9 10 11 12

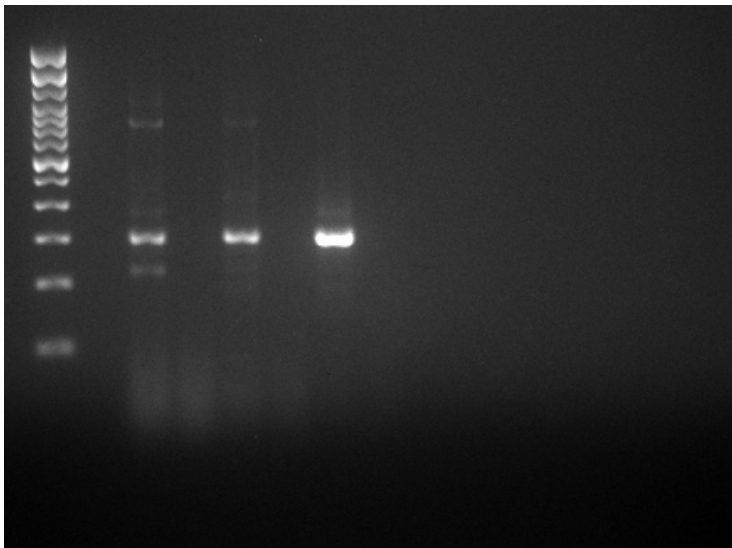
X X X X X X

ASIC1

ASIC1	Product
Primer Pair Sequence	Size, bp
F: 5'-GCCTATGAGATCGCAGGG-3'	305 bp
R: 5'-AAAGTCCTCAAACGTGCCTC-3'	

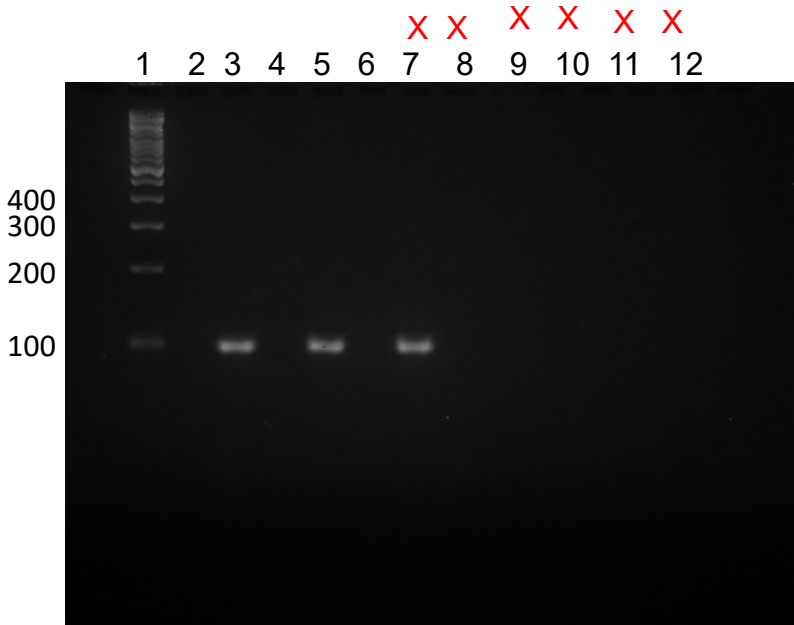
PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light.

500
400
300
200
100



1. Molecular weight marker
2. Blank
3. Pulmonary VSMC + reverse transcriptase
4. Pulmonary VSMC - reverse transcriptase
5. Mesenteric VSMC + reverse transcriptase
6. Mesenteric VSMC - reverse transcriptase
7. Brain tissue + reverse transcriptase
8. Brain tissue - reverse transcriptase
9. Blank
10. Blank
11. Blank
12. Blank

Raw gel images from Figure S3



Stromal Interaction Molecule 1

STIM1	Product
Primer Pair Sequence	Size, bp
F: 5'-ATGCCAATGGTGATGTGGAT-3'	97 bp
R: 5'-CATGGAAGGTGCTGTGTTT-3'	

PCR products were separated using gel electrophoresis on a 3% agarose gel and stained with ethidium bromide for visualization under UV light. STIM1 transcript Fig. S3.

1. Molecular weight marker
2. Blank
3. Pulmonary VSMC + reverse transcriptase
4. Pulmonary VSMC - reverse transcriptase
5. Mesenteric VSMC + reverse transcriptase
6. Mesenteric VSMC - reverse transcriptase
7. Brain tissue + reverse transcriptase
8. Brain tissue - reverse transcriptase
9. Blank
10. Blank
11. Blank
12. Blank