**Substantia nigra pars compacta**

**Knowledge space:**

https://knowledge-space.org

(is down for today)

**Neuromorpho**

neuromorpho.org

Neuroelectro

neuroelectro.org

Tons of articles

channelpedia

http://channelpedia.epfl.ch

\*\*\*

Information found in the articles:

**Morphology:**

**Electrical behavior:**

**Ion currents:**

Wistar rats were anesthetized with chloral hydrate (400 mg/kg, i.p.), at 6, 21, or 40 days of age

**IH**

HCN2 immunolabeling present

P6 rats: in the soma and the proximal dendrites

P21 and P40 rats : in the soma and the proximal and distal dendrites

HCN3

P6, P21, and P40 rats : in the soma and the nuclei

HCN4

P6 : the soma

P21 and P40 : throughout the soma and the proximal and distal dendrites

**L and T type calcium current**

Cav1.2

P6, P21, and P40 : in the soma and the proximal and distal dendrites

Cav1.3

P6 : in the soma and the proximal dendrite

P21 and P40 : throughout the soma and the proximal and distal dendrite

Cav3.1

P6 : perinuclear as well as somatic

P21 : in the soma (perinuclear) and in the proximal and distal den- drites

Cav3.2

P6, P21, P40 : the nuclei

P40 : also in in the somatic cytoplasm and the proximal dendrites

Cav3.3

P6 : in the soma and the proximal dendrites

P21 and P40 : throughout the soma and the proximal and distal dendrites

**A-type potassium current**

Kv1.4 NO

Kv3.4 NO

Kv4.2 NO

Kv4.3

P6 : perinuclear with some labeling at the membrane in the soma and the proximal and distal dendrite

P21 and P40 : the somatodendritic membrane, including distal dendrites, with little perinuclear labeling

**Delayed rectifier potassium current**

No Kv1.1, Kv1.2, Kv1.5, Kv1.6, Kv2.2, or Kv3.1

Kv1.3

P6, P21, and P40 : in the peri- nuclear region and occasionally in the proximal dendrites

Kv2.1

P6, P21 and P40 : in the cytoplasm and concentrated at the membrane in the soma and the proxi- mal and distal dendrites

Kv3.2

P6, P21 and P40 : in the soma, including the nucleus and the proximal and distal dendrites

Kv3.3

P6, P21 : in the nuclei

P40 : in the soma and the proximal dendrites

**Calcium-activated potassium** (SK) current

SK1

P6 : in the soma

P21 and P40 : somatic labeling, including a distinct perinuclear distribution

SK2

P6 : in the soma

P21, P40 : in the soma and extended into the proximal dendrites

SK3

P6 : in the soma and the proximal and distal dendrites, with a slight concentration at the membrane

P21 and P40 : in the same cellular compartments, but the dis- tribution had changed, with concentrated labeling at the cell membrane