

Anti-K_{ir}2.1 (IRK1, Kcnj2)

Product #: APC-026

Current Lot #: AN-08, AN-09, AN-10

Host: Rabbit.

Type: Polyclonal.

Epitope: peptide (C)NGVP ESTST DTPPD IDLHN, corresponding to amino acid residues 392-410 of human Kir2.1 (Accession [P48049](#)).

Epitope location: Intracellular, C-terminal part.

Homology with other species: rabbit, bovine, pig, guinea pig - identical; rat, mouse - 17/19 residues identical; chicken - 15/19 residues identical; pigeon - 14/18 residues identical.

Reactivity Confirmed: rat.

Identity of a peptide: confirmed by mass-spectrography and amino acid analysis.

Purity: affinity purified on immobilized antigen.

Sample Sizes: 50 μ l or 0.2 ml after reconstitution of the lyophilized powder.

Storage before Reconstitution: Lyophilized powder can be stored intact at room temperature for several weeks. For longer periods, it should be stored at -20°C.

Reconstitution: 50 μ l or 0.2 ml deionized water, depending on the sample size.

Antibody Concentration after Reconstitution: 0.6 mg/ml.

Buffer after Reconstitution: phosphate buffered saline (PBS) pH 7.4, 1% BSA, 0.025% NaN₃.

Storage after Reconstitution: the reconstituted solution can be stored at 4°C for up to 2 weeks. For longer periods, small aliquots should be stored at -20°C or below. Avoid multiple freezing and thawing. The further dilutions should be made using a carrier protein such as BSA (1%). Centrifuge **all** antibody preparations before use (10000 \times g 5 min).

Control Antigen Included.

Control Antigen Storage before Reconstitution: Lyophilized powder can be stored intact at room temperature for several weeks. For longer periods, it should be stored at -20°C.

Control Antigen Reconstitution: 100 μ l water.

Control Antigen Storage after Reconstitution: -20°C.

Preadsorption Control: 1 μ g peptide per 1 μ g antibody.

Standard Quality Control of Each Lot: Western blotting.

Applications:

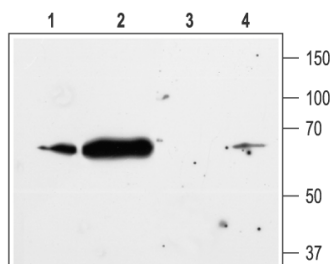
Western Blotting: Rat brain and rat heart membranes (1:200).

Note: Addition of 0.1% Tween to the standard Milk Block is recommended with this lot.

Immunohistochemistry: Rat heart sections.

For research purposes only, not for human use.

Last Update: March 2, 2009.



Western blotting of rat heart (1 and 3) and rat brain (2 and 4) membranes:

1, 2. Anti-Kir2.1 antibody (1:200)

3, 4. Anti-Kir2.1, antibody, preincubated with the control peptide antigen.

References using this antibody:

1. Keren-Raifman, T. *et al.* (2000) *Biochem. Biophys. Res. Commun.* **274**, 852.
2. Trepanier-Boulay, V., *et al.* *Circ Res* (2001) **89**, 437.
3. Clark, R.B. *et al.* (2001) *J. of Physiology* **537.3**, 979.
4. Giovannardi, S. *et al.* (2002) *J. Biol. Chem.* **277**, 12158.
5. Ennis, IL. *et al.* (2002) *J. Clin. Invest.* **109**, 393.
6. Melnyk, P. *et al.* (2002) *Am. J. Physiol. Heart Circ. Physiol.* **283**, 1123
7. Vicente, R. *et al.* (2003) *J. Biol. Chem.* **278**, 46307.
8. Karkanis, T. *et al.* (2003) *Am. J. Physiol. Heart Circ. Physiol.* **284**, H2325.
9. Yan, L. *et al.* (2004) *Diabetes* **53**, 597.
10. Dhamoon, A.S. *et al.* (2004) *Circ. Res.* **94**, 1332.
11. Malinowska, D.H. *et al.* (2004) *Am. J. Physiol. Cell Physiol.* **286**, C495.
12. Gaborit, N. *et al.* (2005) *Circulation* **112**, 471.
13. Melnyk, P. *et al.* (2005) *Cardiovasc. Res.* **65**, 104.
14. Grishin, A. *et al.* (2006) *J. Biol. Chem.* **281**, 30104.
15. Gavillet, B. *et al.* (2006) *Circ Res.* **99**, 407.
16. Yanagi, K. *et al.* (2007) *Stem Cells* **25**, 2712.
17. Vit, J-P. *et al.* (2008) *J. Neurosci.* **28**, 4861.
18. Narazaki, G. *et al.* (2008) *Circulation* **118**, 498.