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Antibody Information Sheet:

Antibody Name: KCNQ2-C1

Antigen: KSKSGLAFRKDPPPEPSPSKGSPC (residues
397-416 of human KCNQ2 from Singh, Nat. Genetics
1998 18:25)

Host: guinea pig #308

Serum bleed date/no: bleed 11/14 POOLED

Affinity purification: vs immunogenic peptide on sulfolink
(Pierce) 6/28/00

Concentration: 200 ug/ml (in Ca/Mg free PBS, 10 mg/ml
IgG-free BSA, 0.05% Na-azide)

Suggested working dilutions:

Western Blot/ECL: ~0.1-0.4 ug/ml

Immunohistochemistry: ~0.5 -1.0 ug/ml
1:200 on unfixed tissue

Immunoprecipitation: 0.5 -1.0 ug/ml

KSKSGLAFRKDPPPEPSPSKGSPC	immunogen
KSKSGLAFRKDPPPEPSPS-----	human variant (Jentsch lab)
KSKSGLTFRKEPQPEPSPS_____C	mouse (variant)



Splice site

Comments:

1. antibody recognizes principle band of ~85 kDa vs human brain or human clone expressed in oocytes, hek or cos cells.
Reference: Cooper 2000 PNAS 97:4914

2. Does not recognize full length rat or mouse KCNQ protein by western blot. Recognizes band of ~60 kDa on mouse brain. This cross-reacting band has not been identified (ec 1999 unpub)

3. no signif immunostaining of fixed tissue. Unfixed shows widespread, intense labeling of mouse AIS and nodes of Ranvier (JL and EC 2004 unpub, Pan et al 2006 JNeurosci).

In addition, unfixed tissue shows variable but often widespread nuclear staining (likely crossreactivity) in mouse tissue sections.

4. In rats, does not label mossy fibers as in mouse, and does not follow the distal AIS labeling pattern as in the Q2N1 antibody (BT).