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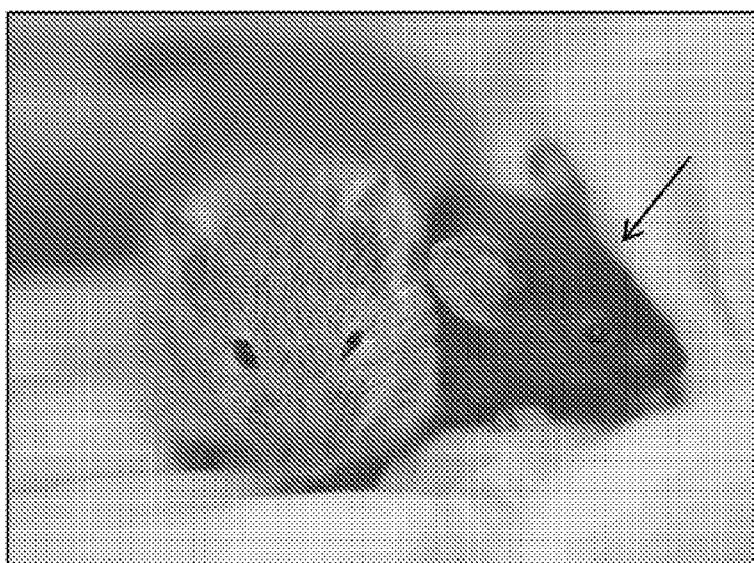
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(54) Title: NAV1.7 KNOCKOUT MICE AND USES THEREOF

FIG. 8B

(57) Abstract: A viable global $Na_v1.7^{-/-}$ knockout mouse is disclosed, and a breeding colony of global $Na_v1.7^{-/-}$ knockout mice. Also disclosed are an isolated mouse gamete that does not encode a functional $Na_v1.7$, produced by the $Na_v1.7^{-/-}$ knockout mouse; an isolated $Na_v1.7^{-/-}$ mouse cell, or a progeny cell thereof, isolated from the $Na_v1.7^{-/-}$ knockout mouse; and a primary cell culture or a secondary cell line and a tissue or organ explant or culture thereof derived from the $Na_v1.7^{-/-}$ knockout mouse. Disclosed also are a hybridoma, wherein the hybridoma was originally formed from the fusion of the isolated $Na_v1.7^{-/-}$ mouse cell mouse cell and a myeloma cell, and a method of making an antibody. Also disclosed are assays useful for screening prospective $Na_v1.7$ inhibitors and dose ranging a test $Na_v1.7$ inhibitor compound, which were validated using the $Na_v1.7^{-/-}$ knockout mouse.

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