Treating Alzheimer’s Disease by blocking TGF-? signaling

**OCR Number:** OCR 5007

**Description:**

- Blocking the transforming growth factor-? (TGF-?) pathway in peripheral macrophages can significantly clear up ?-amyloid plaques in brain.
- These results provide the basis for a novel therapeutic intervention for Alzheimer’s disease by blockade of TGF-?-Smad2/3 signaling in peripheral macrophages.
- Blockade of TGF-? works peripherally without the need to enter the brain and thereby overcoming the blood-brain barrier roadblock.

[Image of graph showing expression of a CD11c promoter–driven dominant-negative TGF-? receptor type II in an Alzheimer’s disease mouse model (Tg2576–CD11c-DNR) improved Alzheimer’s-like behavioral impairment such as hyperactivity.]

**Published/Issued Patents:** [U.S. Pub. App. No. 20110136892](http://example.com)

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**Publications:**


[http://www.sciencedaily.com/releases/2008/05/080530132216.htm](http://www.sciencedaily.com/releases/2008/05/080530132216.htm)

[http://news.bbc.co.uk/2/hi/health/7427541.stm](http://news.bbc.co.uk/2/hi/health/7427541.stm)
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