

**22R-Hydroxycholesterol Protects Neuronal
Cells from β -Amyloid-Induced Cytotoxicity
by Binding to β -Amyloid Peptide**

J Neurochem. 2002 Dec;83(5):1110-9.

22R-Hydroxycholesterol Protects Neuronal Cells from β -Amyloid-Induced Cytotoxicity by Binding to β -Amyloid Peptide

Zhi-Xing Yao^{1,2}, Rachel C. Brown¹, Gary Teper^{1,2}, Janet Greeson³ & Vassilios Papadopoulos^{1,2}

¹*Division of Hormone Research, Departments of Cell Biology, Pharmacology & Neurosciences,* ²*Samaritan Research Laboratories, Georgetown University School of Medicine, Washington, DC 20057 and* ³*Samaritan Pharmaceuticals, Las Vegas, NV 89109.*

Address correspondence and reprint requests to V.P. at Division of Hormone Research, Departments of Cell Biology, Georgetown University School of Medicine, 3900 Reservoir Rd., Washington, DC 20057, U.S.A. (e-mail:papadopv@georgetown.edu.)

Abbreviations: 5-cholesten-3 β ,22R-diol, (22R-hydroxycholesterol); 5-cholesten-3 β ,22S-diol, (22S-hydroxycholesterol); 5-cholesten-3 β -ol (cholesterol); 5-androsten-3 β -ol-17-one or dehydroepiandrosterone (DHEA); 5-pregnen-3 β ,17 α -diol-20-one (17 α -hydroxypregnenolone); 5-pregnen-3 β -ol-20-one (pregnenolone); Ntera2/D1 teratocarcinoma cells (NT2); differentiated human NT2 neurons (NT2N); β -amyloid peptide, (A β); Alzheimer's disease, (AD); cholesterol-protein binding blot assay (CPBBA).