

Title: Alzheimer Disease Overview GeneReview – Table 2

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**Table 2. Alzheimer Disease Susceptibility Genes**

Gene	Potential Functional Contribution to Alzheimer Disease Risk
<i>ABCA7</i>	Efflux of phospholipids & phagocytosis
<i>AKAP9</i>	Kinase anchor protein (association in African Americans only)
<i>BIN1</i>	Clathrin-mediated endocytosis
<i>CASS4</i>	Scaffolding protein of unknown function (in <i>Drosophila</i> ortholog binds to CD2AP ortholog)
<i>CD2AP</i>	Cytoskeletal reorganization & vesicle movement A $\beta$ clearance; protection against tau toxicity
<i>CD33</i>	Cell-cell interactions & cell functions in the innate & adaptive immune systems
<i>CLU</i>	Chaperone function; regulation of cell proliferation
<i>CR1</i>	Regulation of complement activation
<i>EPHA1</i>	Modulates cell migration, axon guidance, & synapse development & plasticity during brain development
<i>FERMT2</i>	Actin assembly & cell shape modulation
<i>HLA-DRB5/DRB1</i>	Immune system regulation
<i>INPP5D</i>	Regulation of gene expression & posttranslational modification of proteins, microglial & myeloid function
<i>MEF2C</i>	Synaptic plasticity
<i>MS4A6A/MS4A4E</i>	Immune modulation
<i>PICALM</i>	Trafficking of synaptic vesicle proteins
<i>PLD3</i>	Phospholipase
<i>PTK2B</i>	Ion signaling & induction of long-term potentiation in hippocampal CA1 neurons
<i>SORL1</i>	Vesicle trafficking
<i>UNC5C</i>	Related to axon extension & cell migration during development

Based on reviews by Naj et al [2014], Del-Aguila et al [2015], Ridge et al [2016], Van Cauwenbergh et al [2016], and Yokoyama et al [2016]

## References

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