**Technology:** Recombinant T-cell receptor ligand for the treatment of cognitive and neuropsychiatric impairment induced by substance addiction

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**Abstract:** Methods are provided for the treatment of subjects with cognitive or neuropsychiatric impairment induced by substance addiction and for increasing cognitive function in a subject with substance addiction. In some embodiments, the methods include administering to the subject a therapeutically effective amount of a major histocompatibility complex (MHC) molecule including covalently linked first, second, and third domains; wherein the first domain is an MHC class II .beta.1 domain and the second domain is an MHC class II .alpha.1 domain; or wherein the first domain is an MHC class I .alpha.1 domain and the second domain is an MHC class I .alpha.2 domain; and wherein the third domain is covalently linked to the first domain and comprises an antigen of the central or peripheral nervous system.