

**Technology:** [Monomeric recombinant MHC molecules useful for manipulation of antigen-specific T-cells](#)

**VA ID Number:** 04-003

**Inventor:** Arthur Vandenkark

**Location:** Portland, OR

**Topic:** Genomics

**USPTO Issue Date:** 1/26/2016

**Patent Number:** 9,243,051

The VA has a jointly owns this patent with The Oregon Health & Science University

**Contact** [Lee Sylvers, PhD](#)

**Abstract:** The present invention provides, in particular embodiments, for modified recombinant T cell receptor (TCR) ligands (RTLs) comprising a MHC class I or MHC class II component. The modified RTLs have redesigned surface features that preclude or reduce aggregation, wherein the modified molecules retain the ability to bind Ag-peptides, target antigen-specific T cells, inhibit T cell proliferation in an Ag-specific manner and have utility to treat, inter alia, autoimmune disease and other conditions mediated by antigen-specific T cells in vivo.