



US009492536B2

(12) **United States Patent**
Offner et al.

(10) **Patent No.:** **US 9,492,536 B2**
(45) **Date of Patent:** ***Nov. 15, 2016**

(54) **COMPOSITIONS AND METHODS USING RECOMBINANT MHC MOLECULES FOR THE TREATMENT OF STROKE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **14/732,145**

(22) Filed: **Jun. 5, 2015**

(65) **Prior Publication Data**
US 2015/0343055 A1 Dec. 3, 2015

Related U.S. Application Data

(63) Continuation of application No. 13/924,275, filed on Jun. 21, 2013, now Pat. No. 9,050,279, which is a continuation of application No. 12/661,038, filed on Mar. 8, 2010, now Pat. No. 8,491,913.

(60) Provisional application No. 61/209,428, filed on Mar. 7, 2009.

(51) **Int. Cl.**
A61K 39/385 (2006.01)
A61K 45/06 (2006.01)
A61K 39/395 (2006.01)
A61K 38/16 (2006.01)
A61K 39/00 (2006.01)

(52) **U.S. Cl.**
CPC *A61K 39/385* (2013.01); *A61K 39/00* (2013.01); *A61K 39/0005* (2013.01); *A61K 39/395* (2013.01); *A61K 45/06* (2013.01); *A61K 2039/605* (2013.01); *A61K 2039/627* (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

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(57) **ABSTRACT**

Two-domain MHC polypeptides are useful for modulating activities of antigen-specific T-cells, including for modulating pathogenic potential and effects of antigen-specific T-cells. Exemplary MHC class II-based recombinant T-cell ligands (RTLs) of the invention include covalently linked $\beta 1$ and $\alpha 1$ domains, and MHC class I-based molecules that comprise covalently linked $\alpha 1$ and $\alpha 2$ domains. These polypeptides may also include covalently linked antigenic determinants, toxic moieties, and/or detectable labels. The disclosed polypeptides can be used to target antigen-specific T-cells, and are useful, among other things, to detect and purify antigen-specific T-cells, to induce or activate T-cells, to modulate T-cell activity, including by regulatory switching of T-cell cytokine and adhesion molecule expression, to treat conditions mediated by antigen-specific T-cells, including treatment and/or prevention of central nervous system damage relating to stroke.