PD-1-Binding Molecules and Methods of Use Thereof

Abstract

The present invention is directed to selected anti-PD-1 antibodies capable of binding to both cynomolgus monkey PD-1 and to human PD-1 : PD-1 mAb 1, PD-1 mAb 2, PD-1 mAb 3, PD-1 mAb 4, PD-1 mAb 5, PD-1 mAb 6, PD-1 mAb 7, PD-1 mAb 8, PD-1 mAb 9, PD-1 mAb 10, PD-1 mAb 11, PD-1 mAb 12, PD-1 mAb 13, PD-1 mAb 14, or PD-1 mAb 15, and to humanized and chimeric versions of such antibodies. The invention additionally pertains to PD-1 -binding molecules that comprise PD-1 binding fragments of such anti-PD-1 antibodies, immunocongugates, and to bispecific molecules, including diabodies, BiTEs, bispecific antibodies, etc., that comprise (i) such PD-1 -binding fragments, and (ii) a domain capable of binding an epitope of a molecule involved in regulating an immune check point present on the surface of an immune cells. The present invention also pertains to methods of using molecules that bind PD-1 for stimulating immune responses, as well as methods of detecting PD-1.

(Figure 19)