

Title (en)

COMPOSITIONS AND METHODS FOR MODULATION OF GENE EXPRESSION

Title (de)

ZUSAMMENSETZUNGEN UND VERFAHREN ZUR MODULATION VON GENEXPRESSION

Title (fr)

COMPOSITIONS ET MÉTHODES DE MODULATION D'EXPRESSION GÉNIQUE

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Abstract (en)

[origin: WO2021026336A2] The present disclosure provides polypeptides, compositions thereof, and methods for suppressing expression of a target gene such as PDCD1, CTLA4, LAG3, or TIM-3. The polypeptides disclosed herein include a DNA binding domain (DBD) that binds to a sequence of the target gene and a transcriptional repressor domain that suppresses expression of the target gene. The transcriptional repressor domain may be a known transcriptional repressor or may be a novel transcriptional repressor disclosed herein. Also disclosed herein are novel transcriptional repressors that are conjugated to a heterologous DNA binding domain and mediate suppression of expression of a target gene bound by the DNA binding domain. Also disclosed herein are split systems for modulating gene expression where the DBD and the functional domain are provided as separated polypeptides and are assembled using dimerization of a heterodimer pair, where the DBD and the functional domain are each fused to a member of the heterodimer pair.

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