COMPOSITIONS AND METHODS FOR THE EXPRESSION OF CRISPR GUIDE RNAS USING THE H1 PROMOTER

Abstract

The presently disclosed subject matter provides compositions and methods for the expression of CRISPR guide RNAs using the HI promoter. In particular, compositions and methods are provided for the use of the HI promoter to express CRISPR guide RNA (gRNA) with altered specificity of the 5' nucleotide, as well as use of the HI promoter sequence as a bidirectional promoter to express Cas9 nuclease and the gRNA simultaneously. Compositions and methods are also provided for the expression and regulation of gRNA expression in vivo through the use of RNA ribozymes and regulatable aptazymes.

Figure: None