Title (en)

A COMBINATION OF SPLIT ORTHOGONAL PROTEASES WITH DIMERIZATION DOMAINS THAT ALLOW FOR ASSEMBLY

Title (de)

KOMBINATION AUS GETEILTEN ORTHOGONALEN PROTEASEN MIT DIMERISIERUNGSDOMÄNEN ZUR ASSEMBLIERUNG

Title (fr)

COMBINAISON DE PROTÉASES ORTHOGONALES DÉDOUBLÉES PRÉSENTANT DES DOMAINES DE DIMÉRISATION PERMETTANT UN ASSEMBLAGE

Publication

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Application

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Abstract (en)

[origin: WO2018069782A2] Invention refers to combination of split orthogonal proteases that recognize and cleave target sequence of at least 6 amino acids. Parts of split orthogonal proteases are fused to dimerization domains that allow formation of the whole protease from two split protease parts. At least two orthogonal proteases are designed as split fragments fused to dimerization domains where dimerization can be induced with either light, chemicals or other input signal. Proteases cleave one or more target proteins that include cleavage site for one or more orthogonal proteases and act as a signal transducers, reporters or therapeutic proteins. With appropriately selected target proteins, logical circuits mediated by proteases can be prepared. The invention also relates to cells that contain expressed split proteases to transmit the signal.

IPC 8 full level

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