HYBRID SUPPRESSOR TRNA FOR VERTEBRATE CELLS

ABSTRACT

This invention provides compositions and methods for producing translational components that expand the number of genetically encoded amino acids in vertebrate cells. The components include orthogonal tRNA's, orthogonal aminoacyl-tRNA synthetases, orthogonal pairs of tRNA's/synthetases and unnatural amino acids. Proteins and methods of producing proteins with unnatural amino acids in vertebrate cells are also provided. The present invention provides vertebrate cells with translation components, e.g., pairs of orthogonal aminoacyl-tRNA synthetases (O-RSs) and orthogonal tRNA's (O-tRNA's) and individual components thereof, that are used in vertebrate protein biosynthetic machinery to incorporate an unnatural amino acid in a growing polypeptide chain, in a vertebrate cell.

No suitable figure