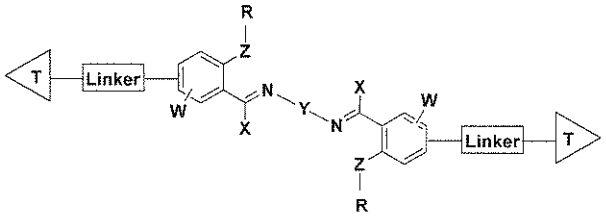
Method using fluorescent turn-on probes for cell-specific detection

Abstract

The invention provides method for imaging the activity of enzymes or bioactive molecules in cells using fluorescent probes with aggregation-induced emission properties and excited-state intramolecular proton transfer properties.

The fluorescent probes prepared according to the invention are those of formula (I),



(I)

wherein W, X, Y, Z have the meaning as described in the description, R is a reactive group that can interact with enzymes and other bioactive molecules, Linker is a single bond or a combination of chemical bonds linking the targeting group T to the probe molecule, and T represents a targeting group that has an ability to interact with an organelle.

Figure 1 shows the schematic principle of the reaction of the fluorescent probes that lead to a turn-on fluorescence at the location of the organelles in the presentence of the enzyme or other bioactive molecule.

The invention further provides the fluorescent probes or precursors of the formula (I) and suitable fluorophores for such probes.

(Fig. 1)