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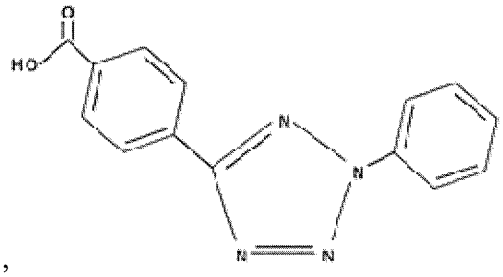
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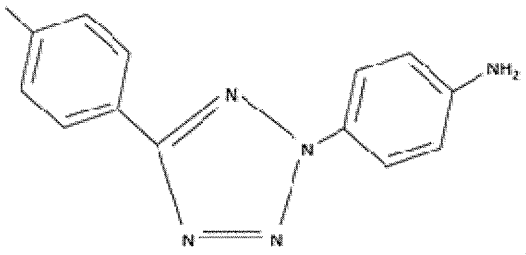
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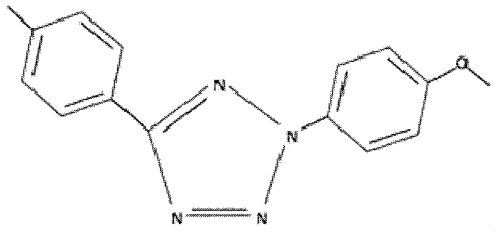
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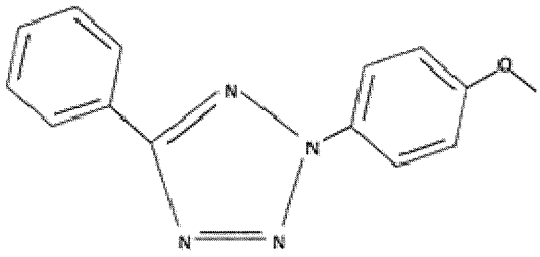
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4. The method according to claim 1, wherein said probe is biotinylated.

5. The method according to claim 1, wherein said exposure occurs at a wavelength in the range of 10 nm to 1mm.

6. The method according to claim 5, wherein said wavelength is 302 nm.

7. The method according to claim 1, wherein the step of exposure further comprises the step of forming a reactive intermediate.

8. The method according to claim 7, wherein said reactive intermediate is a compound comprising a nitrile imine dipole.

9. The method according to claim 1, wherein said fluorescent sample after exposure to light is a cycloadduct comprising a fluorescent pyrazoline.

10. The method according to claim 1, wherein said acrylic acid or its derivatives thereof is present at a concentration of at least 100 nM before introducing the probe to said sample.

11. The method according to claim 1, wherein the diaryltetrazole compound introduced is present at a concentration of at least 1 nM in said sample.

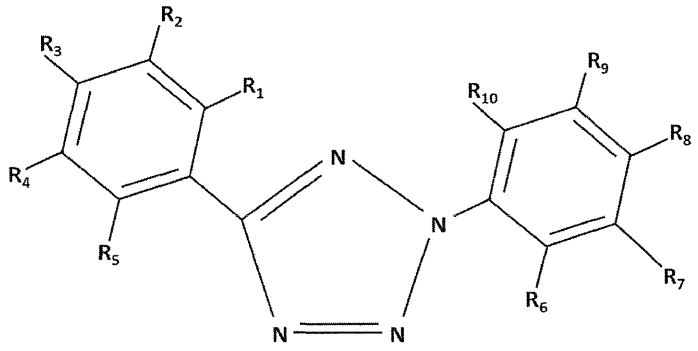
12. The method according to claim 1, wherein the exposure of said sample to light occurs under alkaline conditions.

13. The method according to claim 1, wherein said sample is a microorganism.

14. The method according claim 13, wherein said microorganism is a bacterium.

15. A probe for detecting the presence or absence of acrylic acid or its derivatives thereof in a sample, wherein the probe comprises a diaryltetrazole compound.

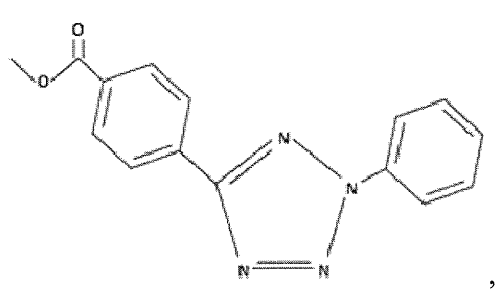
16. The probe according to claim 15, wherein the diaryltetrazole compound has the formula (I):



Formula I

wherein each of R_1 to R_{10} is independently selected from the group consisting of hydrogen, oxygen, sulfur, halogen, optionally substituted alkyl, optionally substituted acyl, optionally substituted ester, optionally substituted amino, optionally substituted amine, optionally substituted amide, optionally substituted carboxylic acid, optionally substituted carbonyl, optionally substituted urea, optionally substituted alkoxy, optionally substituted alkyloxy, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted sulfonamide, optionally substituted aminosulfonamide, optionally substituted sulfonylurea, optionally substituted oxime, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heterocycloalkyl and optionally substituted heteroaryl.

17. The probe according to claim 16, wherein said diaryltetrazole compound is selected from the group consisting of: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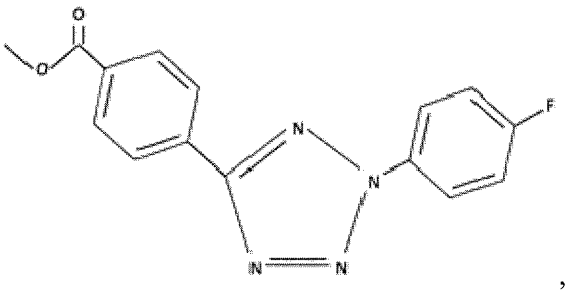
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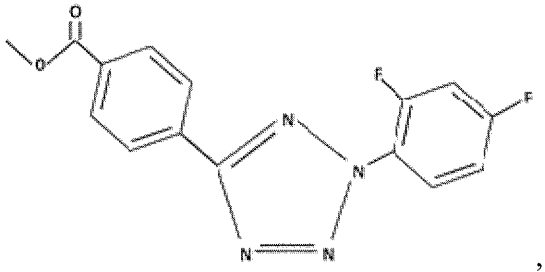
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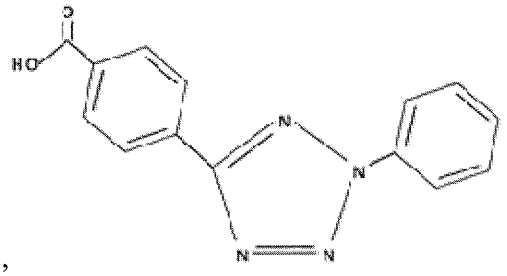
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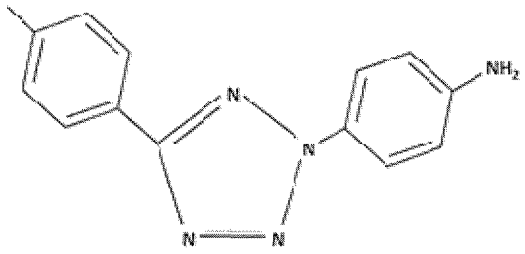
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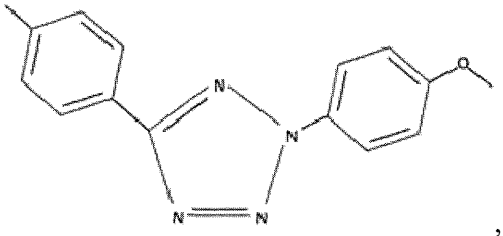
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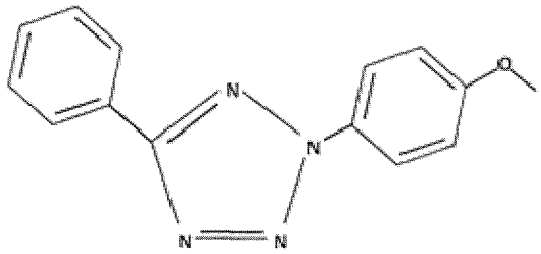
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18. The probe according to claim 15, wherein said probe is biotinylated.

19. Use of a probe according to claims 15 to 18 for the detection of the presence or absence of acrylic acid or its derivatives.

20. A kit comprising the probe according to claims 15 to 18 for detecting the presence or absence of acrylic acid or its derivatives, wherein the probe is contacted with the acrylic acid or its derivatives.