

TcAg1 small molecule (tool compound)

Catalogue number: 160762

Sub-type: Fluorescent Probe

Images:

Contributor

Inventor: David Smith ; Zelong Lim ; Elizabeth New

Institute: University of Sydney

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: TcAg1 small molecule (tool compound)

Alternate name: Thiocoumarin silver sensor 1

Class:

Conjugate:

Description: Silver is widely used in industrial applications due to its conductivity and malleability properties, as well as in medicine as an antibiotic coating and in wound treatment. The high toxicity of silver is crucial for the unique antibacterial properties of this metal, but there is concern about the effect of aquatic silver pollution on the fresh water invertebrates and fish. Traditional instrument methods for measuring silver include CIP-MS, GFAAS and voltammetry. However, these techniques require sample preparation or digestion and complex instruments and trained operators, and they lack the ability to differentiate between metallic silver, precipitated silver salts and complexes and free Ag(I). Here an alternative approach has been developed using a fluorescent sensor that can selectively and reversibly respond to Ag(I) ions in solution.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity:

Selectivity: Ag(I) ions only

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: For application notes please visit PMID:30021927

Target details

Target:

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application: Reversible fluorescent probe for monitoring Ag (I) ions

Application notes:

Handling

Format:

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions:

Related tools

Related tools:

References

References:

CancerTools.org