REASH Reagent

Catalog number: 22332
Unit size: 100 Tests

Product Details

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	545.37
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	571 nm
Emission Wavelength	584 nm

Applications

REASH is a resorufin derivative, modified to contain two arsenic atoms at a set distance from each other. The biarsenical labeling technology works through the high-affinity interaction of arsenic for thiols. When REASH binds to tetracysteine sequences, its biarsenical group reacts rapidly with Cys-Cys moiety and the tag become highly fluorescent in red. The biarsenical labeling reagent REASH is one of the smallest expression tags for labeling a protein that contains a six-amino acid motif with a Cys-Cys-X1-X2-Cys-Cys amino acid sequence. The most commonly used tetracysteine is the six amino acid Cys-Cys-Pro-Gly-Cys-Cys sequence. As this sequence rarely appears in endogenous proteins, incorporating the sequence into target proteins generates a small but highly specific target for protein labeling. REASH generates a strong red fluorescent signal when binding to recombinant proteins containing the tetracysteine motif Cys-Cys-Pro-Gly-Cys-Cys. It can be used for monitoring protein localization, turnover and trafficking, receptor signaling and internalization.