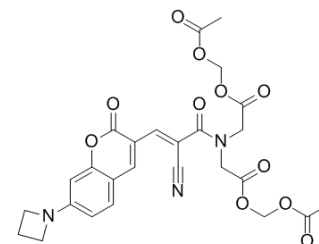


RT-AM

Cat. No.:	HY-108715A		
Molecular Formula:	C ₂₆ H ₂₅ N ₃ O ₁₁		
Molecular Weight:	555.49		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	RT-AM is a pro-drug real thiol. Real Thiol is a reversible reaction-based fluorescent probe which can quantitatively monitor the real-time glutathione dynamics in living cells.
In Vitro	To enhance the cell permeability of Real Thiol, the carboxylic acid groups is converted to acetoxymethyl (AM) esters, which are readily hydrolysed by esterases to regenerate Real Thiol inside cells. For cells treated with the RT-AM, real-time ratiometric images of the rapid changes of intracellular GSH concentrations in single cells can be generated by dividing the fluorescence intensity values for the 405 nm channel by the 488 nm channel at each corresponding pixel [1].

PROTOCOL

Cell Assay [1]	<p>The HeLa cell line is grown in DMEM media supplemented with 10% FBS and 1% 1003 Pen Strep. Cells are cultured under a controlled atmosphere (37°C, 5% CO₂). Glass bottom dishes are used for cell culture due to confocal scanning requirements. Cells are treated with RT-AM (1 μM with 1% DMSO in DMEM) for 10-15 min before imaging. Confocal images are acquired with 405 nm laser/418–495 nm filter and 488 nm laser/499–615 nm filter. All the microscope settings are kept consistent in each [1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
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REFERENCES

[1]. Jiang X, et al. Quantitative real-time imaging of glutathione. Nat Commun. 2017 Jul 13;8:16087.

Caution: Product has not been fully validated for medical applications. For research use only.

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