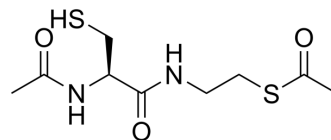


I-152

Cat. No.:	HY-153340		
CAS No.:	311343-11-0		
Molecular Formula:	C ₉ H ₁₆ N ₂ O ₃ S ₂		
Molecular Weight:	264.36		
Target:	Keap1-Nrf2		
Pathway:	NF-κB		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (378.27 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.7827 mL	18.9136 mL	37.8272 mL
		5 mM	0.7565 mL	3.7827 mL	7.5654 mL
		10 mM	0.3783 mL	1.8914 mL	3.7827 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (9.46 mM); Clear solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (9.46 mM); Clear solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (9.46 mM); Clear solution; Need ultrasonic 				

BIOLOGICAL ACTIVITY

Description	I-152 is a conjugate containing N-acetyl-cysteine (NAC) and cysteamine (MEA). I-152 activates NRF2 and ATF4 signals. I-152 has anti-proliferative properties ^[1] .
In Vitro	<p>I-152 (1 mM; 1 h or 2 h) reduces the NRF2 mRNA level in RAW 264.7 cells^[1].</p> <p>I-152 (1 mM; 0-60 min) reduces the level of NRF2 and p53, increases the expression of ATF4 in RAW 264.7 cells^[1].</p> <p>I-152 (0.062, 0.125, 0.25 or 1 mM) increases the level of Gclc mRNA (6 h or 24 h), Chac1 mRNA (6 h or 24 h) and Chop mRNA (6 h) in RAW 264.7 cells^[1].</p>

I-152 (0.062, 0.125, 0.25 or 1 mM; 2 h) increases the level of GSH in RAW 264.7 cells^[1].
I-152 (1 mM; 1, 2, 6 and 24 h) activates ATF4 mRNA expression in RAW 264.7 cells^[1].
I-152 (1 mM; 24 h and 48 h) exhibits cytotoxic and growth inhibitory effects on RAW 264.7 cells^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis^[1]

Cell Line:	RAW 264.7 cells.
Concentration:	0.062, 0.125, 0.25, 1, 5 or 10 mM.
Incubation Time:	2 h or 24 h.
Result:	Reduced the expression of NRF2/ β -ACTIN, increased the expression of GCLM.

REFERENCES

[1]. Crinelli R, et al. Activation of NRF2 and ATF4 Signaling by the Pro-Glutathione Molecule I-152, a Co-Drug of N-Acetyl-Cysteine and Cysteamine. *Antioxidants (Basel)*. 2021 Jan 26;10(2):175.

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

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