

**Nrf2 Activator II, AI-1 - CAS 75483-04-4 - Calbiochem The Nrf2 Activator II, AI-1, also referenced under CAS 75483-04-4, modulates the biological activity of Nrf2. This small molecule/inhibitor is primarily used for Biochemicals applications.**

Art. ID	SAF-492041-25MG
Unit	1 x 25 mg
Deliverydetails	No Dangerous Good /not restricted

Description

A cell-permeable chloro-quinolinone compound that selectively and covalently modifies Kelch-like ECH-associated protein 1 (Keap1)-Cys151 and represses Keap1 function and reduces Nrf2 (Nuclear factor erythroid 2-related factor 2)-Keap1 interaction. Shown to stabilize Nrf2 by inhibiting the Keap1-driven ubiquitination of Nrf2 and thereby activating the Nrf2-ARE (antioxidant response element) pathway (EC50 = 2.7  $\mu$ M in neuroblastoma IMR-32 cells). Offers protection against H<sub>2</sub>O<sub>2</sub> induced oxidative stress, but unlike tert-butylhydroquinone (Cat. No. 286888). AI-1 does not act as a free radical scavenger. Its anti-oxidant effects are mediated via Nrf2 induced antioxidant response. Does not affect mutant ARE where GC are substituted with AT within the core ARE sequence., A cell-permeable chloro-quinolinone compound that selectively and covalently modifies Kelch-like ECH-associated protein 1 (Keap1)-Cys151 and represses Keap1 function and reduces Nrf2 (Nuclear factor E2-related factor 2)-Keap1 interaction. Shown to stabilize Nrf2 by inhibiting the Keap1-driven ubiquitination of Nrf2 and thereby activating the Nrf2-ARE (antioxidant response element) pathway (EC50 = 2.7  $\mu$ M in neuroblastoma IMR-32 cells). Offers protection against H<sub>2</sub>O<sub>2</sub> induced oxidative stress, but unlike tert-butylhydroquinone (Cat. No. 286888) AI-1 does not act as a free radical scavenger. Its anti-oxidant effects are mediated via Nrf2 induced antioxidant response. Does not affect mutant ARE where GC are substituted with AT within the core ARE sequence.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	AI-1	[75483-04-4]				