

## **Data Sheet**

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 Product Name
 : TBHQ

 Cat. No.
 : PC-42172

 CAS No.
 : 1948-33-0

 Molecular Formula
 : C<sub>10</sub>H<sub>14</sub>O<sub>2</sub>

 Molecular Weight
 : 166.217

 Target
 : Keap1-Nrf2

 Solubility
 : 10 mM in DMSO

## **Biological Activity**

TBHQ (tert-Butylhydroquinone) is a phenolic antioxidant and a selective inducer and activator of **Nrf2** that ameliorates doxorubicin-induced cardiotoxicity in vivo.

TBHQ ameliorates the doxorubicin-induced oxidative stress and apoptosis, increases the nuclear accumulation of Nrf2 and the Nrf2-regulated gene expression, including HO-1 and NQO-1 expression.

TBHQ also ameliorates early brain injury after experimental subarachnoid emorrhage in mice by enhancing Nrf2-independent autophagy.

## References

Lin H, et al. *Mol Pharmacol*. 2014 May;85(5):682-91.

Wang LF, et al. *Am J Transl Res*. 2015 Oct 15;7(10):1724-35.

Li T, et al. *Neurochem Res*. 2015 Sep;40(9):1829-38.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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