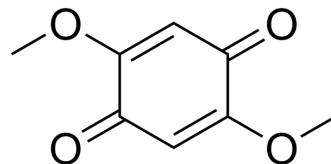


2,5-DMBQ

Cat. No.:	HY-W112021
CAS No.:	3117-03-1
Molecular Formula:	C ₈ H ₈ O ₄
Molecular Weight:	168.15
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

2,5-DMBQ (2,5-Dimethoxybenzoquinone) serves as an extracellular reductant. 2,5-DMBQ is involved in a crucial redox cycle, namely the extracellular hydroquinone-quinone redox cycle. In this cycle, 2,5-DMBQ is capable of reducing extracellular Fe³⁺ and generating H₂O₂. 2,5-DMBQ plays a pivotal role in the biodegradation mechanism of brown rot fungal, assisting the fungi in decomposing and utilizing organic matter^{[1][2]}.

REFERENCES

[1]. Varela E, et al. Effect of pH and oxalate on hydroquinone-derived hydroxyl radical formation during brown rot wood degradation. Appl Environ Microbiol. 2003;69(10):6025-6031.

[2]. Jensen KA Jr, et al. Pathways for extracellular Fenton chemistry in the brown rot basidiomycete *Gloeophyllum trabeum*. Appl Environ Microbiol. 2001 Jun;67(6):2705-11.

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

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