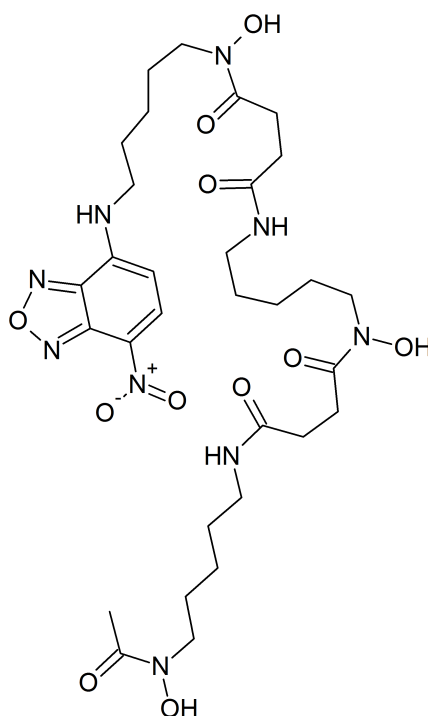


PRODUCT INFORMATION

ME047.1 (1 mg)
ME047.2 (5 mg)

Product Name: **7-Nitrobenz-2-oxa-1,3-diazole-desferrioxamine (NBD-DFO)**



Product Specifications

catalogue no.:	ME047
chemical name:	7-Nitrobenz-2-oxa-1,3-diazole-desferrioxamine (NBD-DFO)
synonyms:	NBD-DFO
IUPAC name:	N'5[acetyl(hydroxy)amino]pentyl}N-hydroxy-N(5{[4(hydroxy{5[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]pentyl}amino)4-oxobutanoyl]amino}pentyl)butanediamide
molecular formula:	C ₃₁ H ₄₉ N ₉ O ₁₁
molecular weight [g/mol]:	723.78
CAS:	[-]
purity:	97%+
category:	Medchem Compounds
melting point:	n.d.
boiling point:	n.d.
appearance:	yellow solid
solubility:	DMSO
long term storage:	-20°C, stored dry and protected from light
NMR analytics:	500 MHz (CDCl ₃)
characteristics:	- A high-affinity Fe ³⁺ specific fluorescent indicator/chelator

- A fluorescent analogue of the natural siderophore Desferrioxamine B

- The fluorescence is quenched upon complexation with Fe^{3+}
- Quantitative assessment

Safety Information

R-Sentence: R: 36/37/38
 S-Sentence: S: 26-24/25
 hazardous substance symbol: Xn
 safety info: Caution, substance not fully tested. Potential health effects.

References

1. S. D. Lytton et. al., Anal. Biochem. (1992) Sept. 205(2): 326-333
2. E. Bar-Ness et al., Plant Physiol. (1992) 99, 1329
3. S. D. Lytton et al., Molecular Pharmacology (1991), 40, 584-590
4. O. Ardon, J. et. al., Bacteriology,

Application Notes

The product is used as a fluorescence marker/indicator or chelator for Fe^{3+} in biological samples, especially to study iron uptake by plants. The dye is fluorescent only when unferrated and can thus be used as a probe to follow iron removal f

Ordering Information

Cat. No.	Product Name	Quantity	Price
ME047.1	N'[5[acetyl(hydroxy)amino]pentyl]N-hydroxy-N-(5[[4(hydroxy{5[(7-nitro-2,1,3-benzoxadiazol-4-yl)-amino]pentyl}amino)4-oxobutanoyl]amino}pentyl)butanediamide	1 mg	419,- €
ME047.2	N'[5[acetyl(hydroxy)amino]pentyl]N-hydroxy-N-(5[[4(hydroxy{5[(7-nitro-2,1,3-benzoxadiazol-4-yl)-amino]pentyl}amino)4-oxobutanoyl]amino}pentyl)butanediamide	5 mg	975,- €