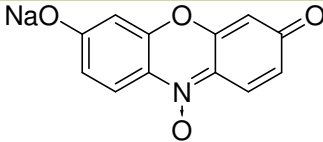


# Resazurin, sodium salt

(also known as Alamar Blue\*)

## Instruction Manual

Catalog Number	PK-CA707-10054
Description	Resazurin, which is the N-oxide of the fluorescent dye resorufin, is useful for detecting reductive activities in cells and has been widely used for measuring cell proliferation and mitochondrial metabolic activity. Resazurin itself is non-fluorescent until it is reduced to the highly red fluorescent resorufin (PK-CA707-10062). Usually, NADPH or NADH is the reductant that converts resazurin to resorufin in the presence of diaphorase as the enzyme. Thus, resazurin can be used to detect NADH, NADPH, or diaphorase level. Furthermore, the resazurin/diaphorase/NADPH system can be used to detect any biochemical or enzyme activity that is involved in a biochemical reaction generating NADH or NADPH. Although resazurin is available from most of the chemical suppliers, a trace amount of resorufin contaminant often makes the material unsuitable for bioassay applications. We supply a high grade resazurin that has a minimal background fluorescence. Please also see our ready-to-use Fluorometric Cell Viability Kit I (PK-CA707-30025-1/-30025-2).
Quantity	10 mg
Excitation / Emission Maxima	$\lambda_{ex} \backslash \lambda_{em}$ (pH 9) = 602 nm/none; Extinction Coefficient: 35,000
Molecular Structure	
Molecular Weight / Molecular Formula	251.17 Da; C <sub>12</sub> H <sub>6</sub> NNaO <sub>4</sub>
Purity	≥ 95% by HPLC
Appearance / Formulation / Solubility	Dark-green/black solid; soluble in DMSO or water.
Storage & Stability	Store at ≤4°C and protect from light.
Applications	See description.
References	1) J. Clin. Lab. Anal. 9, 89(1995); 2) J. Immunol. Methods 175, 181 (1994) 3) J. Anal. Toxicol. 8, 273(1984) 4) Clin. Chem. 29, 171(1983) 5) Biochem. Biophys. Acta 484, 249(1977) 6) Clin. Chim. Acta 107, 149(1980) 7) Clin. Chem. 26, 613(1980) 8) Anal. Biochem. 164, 482(1987) 9) Clin. Chim Data 216, 135(1993)
Caution	Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

\* Alamar Blue is a registered trademark of AccuMed International, Inc.

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