

Product Name:	Riboflavin
Product Number:	R009
CAS Number:	83-88-5
Molecular Formula:	$C_{17}H_{20}N_4O_6$
Molecular Weight:	376.36
Form:	Powder
Appearance:	Yellow to orange crystalline powder
Solubility:	Alcohol: Practically insoluble Water: 70 µg/mL
Absorbance:	Limit of Lumiflavin (440nm): ≤0.025
Melting Point:	290 °C
Optical Rotation:	-115 to -135°
Storage Conditions:	2-8 °C, protect from light
Description:	Riboflavin is a sparingly soluble (0.085 mg/mL) member of the B vitamins (B2) and serves as a derivative of many flavoproteins in both plants and animals.
Mechanism of Action:	Riboflavin is a precursor of FAD (flavin adenine dinucleotide); a redox reaction cofactor, and FMN (flavin mononucleotide); an electron carrier involved in photosynthesis.
Plant Biology Applications	Riboflavin is used in plant cell culture because of its indirect role in photosynthesis.
References:	Scott, J. M., and Et Al. "Riboflavin, Flavin Mononucleotide, and Flavin Adenine Dinucleotide in Human Plasma and Erythrocytes at Baseline and after Low-dose Riboflavin Supplementation." <i>Clinical Chemistry</i> 48.9 (2002): 1571-577. www.ncbi.gov . Sept. 2002. Web. 4 Sept. 2012.