# **PRODUCT** INFORMATION



2,2'-Biguinoline-4,4'-dicarboxylic Acid (sodium salt)

Item No. 30425

CAS Registry No.: Synonyms:	979-88-4 BCA, Bicinchoninic Acid, 2,2'-Bicinchoninic Acid, 4,4'-Dicarboxy-2,2'-biguinoline	• 2Na+
MF:	$C_{20}H_{10}N_2O_4 \bullet 2Na$	
FW:	388.3	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 264 nm	
Supplied as:	A crystalline solid	ŤŤ
Storage:	-20°C	
Stability:	≥4 years	0 10-

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

2,2'-Biquinoline-4,4'-dicarboxylic acid (sodium salt) is supplied as a crystalline solid. Aqueous solutions of 2,2'-biguinoline-4,4'-dicarboxylic acid (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 2,2'-biguinoline-4,4'-dicarboxylic acid (sodium salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

2,2'-Biquinoline-4,4'-dicarboxylic acid (BCA) is a colorimetric reagent for the detection of copper (Cu<sup>+</sup>).<sup>1,2</sup> BCA and Cu<sup>+</sup> form a stable 2:1 complex that has an absorbance maximum at 562 nm.<sup>1</sup> It is commonly used as a reagent in the colorimetric BCA protein quantitation assay in which Cu<sup>2+</sup> is converted to Cu<sup>+</sup> as a function of protein concentration under alkaline conditions.<sup>1,3</sup>

## References

- 1. Smith, P.K., Krohn, R.I., Hermanson, G.T., et al. Measurement of protein using bicinchoninic acid. Anal. Biochem. 150(1), 76-85 (1985).
- 2. Brenner, A.J. and Harris, E.D. A quantitative test for copper using bicinchoninic acid. Anal. Biochem. 226(1), 80-84 (1995).
- 3. Walker, J.M. The bicinchoninic acid (BCA) assay for protein quantitation. Methods Mol. Biol. 32, 5-8 (1994).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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