



Product Data Sheet

Product Name:	Phytochelatin 5, PC5	
Catalog Number:	AS-61190 (1 mg)	Lot Number: See label on vial
Sequence:	H- γ -Glu-Cys- γ -Glu-Cys- γ -Glu-Cys- γ -Glu-Cys- γ -Glu-Cys-Gly-OH (3-letter code) (γ E-C) ₅ -G (1-letter code)	
Molecular Weight:	1236.4	
Peptide Purity:	>95%	
Appearance:	Lyophilized white powder	

Peptide Reconstitution: Phytochelatin 5 peptide is freely soluble in water.

Storage: Phytochelatin 5 peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at -20°C or lower. Reconstituted peptide can be aliquoted and stored at -20°C or lower.

Description: A glutathione-derived heavy metal-detoxifying peptide of higher plants consisting of 5 units of γ Glu-Cys. Ref: Grill, E. et al. *Science* **230**, 674 (1985); Rauser, WE. *Plant Physiol.* **109**, 1141 (1995).

Additional Information: Listed below are relevant information that may provide a guideline on how to use this product. End users will have to adapt to their own specific applications.

For quantification of PC_n, respective standards ranging from PC₁ to PC₅ were obtained from Anaspec Inc. (Anaspec Inc., San Jose, CA, USA). All standard solutions were prepared and diluted in 1:1 acetonitrile:water solvent mixture. Separate stock solutions of 100 mg mL⁻¹ of each phytochelatin were prepared and stored at -80°C . Aliquots of these solutions were mixed to obtain a 10 mg mL⁻¹ mixed working standard stock solution that was stored at -20°C . Six-point calibration curves of mixed PC_n analytes were prepared daily at 1, 10, 100, 250, 500, and 1000 $\mu\text{g mL}^{-1}$ concentrations using the 10 mg mL⁻¹ stock solution. The final volume was brought up to 0.5 mL using 1:1 acetonitrile:water solvent mixture and stored at -4°C . Calibration curves were used for quantifying phytochelatin in the experimental plant samples-[Andra, SS. et al. *Environ. Pollut.* **157**, 2173 \(2009\).](#)

Published Citations:

Minocha, R. et al. *J. Chromatogr. A* **1207**, 72 (2008).
Andra, SS. et al. *Environ. Pollut.* **157**, 2173 (2009).

Related Products:

Name	Cat #	Size
Phytochelatin 2, PC2 (yE-C) ₂ -G	AS-60791	1 mg
Phytochelatin 3, PC3 (yE-C) ₃ -G	AS-60790	1 mg
Phytochelatin 4, PC4 (yE-C) ₄ -G	AS-60789	1 mg
Phytochelatin 6, PC6 (yE-C) ₆ -G	AS-61191	1 mg

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