

Hydroxyproline & Collagen Assay Kits

Hydroxyproline (Hyp) is a non-standard amino acid, found in collagen (COL), which contains 12-14% Hyp by mass. Hyp measurement is a direct measure of the amount of COL. COL is the most abundant protein in mammals and several conditions (i.e. tumor invasion/metastasis, rheumatoid arthritis, cardiopulmonary fibrosis) affect its turnover. Hyp and Collagen estimation protocols are based upon Hyp oxidation and Ehrlich's reagent under acidic conditions (Perchloric Acid- PCA). However, PCA requires special handling and waste-disposal protocols. BioVision's Hydroxyproline Assay Kits (K555 and K206) and Total Collagen Assay Kits (K218 and K406) use proprietary developer solutions to accurately measure Hyp and COL in tissue and protein/peptidase hydrolysates. They are quick, can detect a minimum of 0.05 µg hydroxyproline/0.5 µg collagen per well in a 96-well format and generate colorimetric results that are virtually identical.

Key Features:

- **Non-radioactive**, homogeneous assays
- **Specific assays**
- **Convenient**: minimal sample preparation; fast protocols
- **Cost effective**: 50/100 assays; **High Throughput Screening compatible**
- **Validated**: using mammalian tissues, biological fluids

Hydroxyproline Total Collagen	K555 (Classic Method) K218 (Classic Method)	K226 (PCA-Free) K406 (PCA-Free)
Perchloric Acid	Yes	No
Hydrolysis (pH)	Acid (HCl)	Alkaline (NaOH)
Hydrolysis time (h)	3	1
Reaction Temperature (°C)	65	65
Reaction time (min)	90	45
OD (nm)	560	560

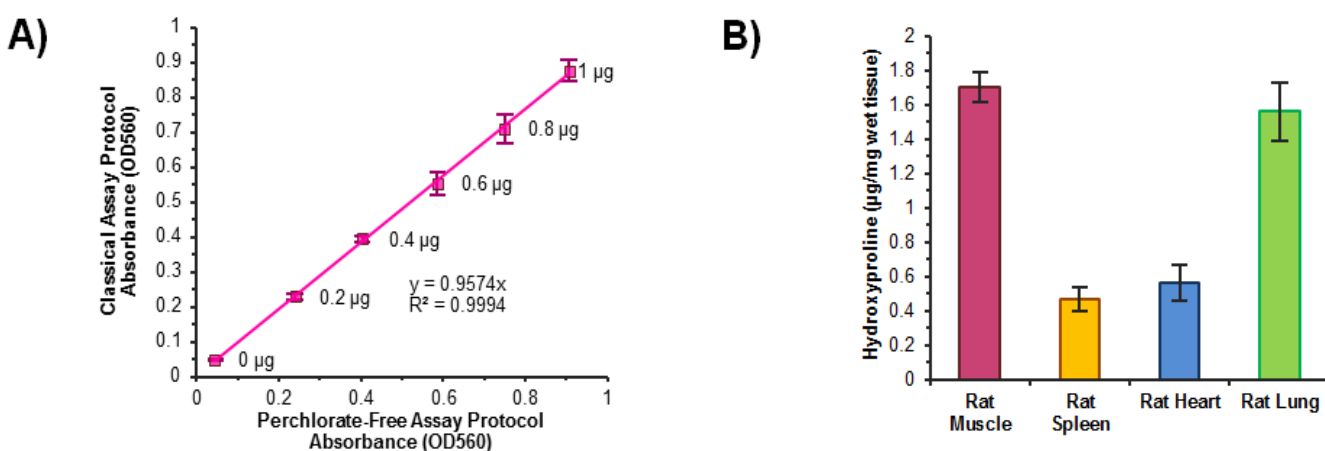


Figure: A) Correlation between hydroxyproline standard curve absorbance values obtained using the classical PCA-based assay kit (K555-100) and the PCA-free assay (K226-100). Both methods show excellent correlation ($R^2 > 0.999$). B). Estimation of total hydroxyproline content in rat tissues using K226-100. Data are mean \pm SEM of 3-4 replicates, assayed according to the kit protocols

Visit [www. BioVision.com](http://www.BioVision.com) for a comprehensive overview on other Metabolism, Obesity & Diabetes Research Products!

155 S. Milipitas Blvd, Milipitas, CA 95035
 T: 408-493-1800 F: 408-493-1801
 Toll Free: 800-891-9699 (US Only)

BioVision
 BioVision Incorporated

