



Standard Human Keratin K14 (Recombinant)

Description	Recombinant human keratin K14 (formerly also designated cytokeratin 14)
Molecular Weight	51,662 (+ methionin) 51,530 (- methionin; calculated from sequence) 50,000 (determined by SDS gelelectrophoresis)
Source	E. coli
Purity	> 95% (determined by SDS gelelectrophoresis)
Application	Protein standard in 1D and 2D SDS gelelectrophoresis Immunoassays Immunization
Isoelectric Point	pI 5.3 (4.92 calculated from sequence)
Reconstitution	Reconstitute with 175 µl distilled water (final volume 250 µl) Reconstitute with 70 µl distilled water (final volume 100 µl) Final solution: 30 mM Tris/HCl pH 8, 9.5 M urea, 2 mM DTT, 2 mM EDTA, 10 mM methylammonium chloride; protein concentration: 1 mg/ml
Storage	At 2-8°C (lyoph.); at -20°C (reconstituted)
Reference	

Herrmann H, Wedig T, Porter RM, Lane EB, Aebi U: Characterization of early assembly intermediates of recombinant human keratins. *J Structural Biology* 137, 82-96 (2002)

Reconstitution to filaments is performed by mixing equimolar amounts of keratins of type I and type II at concentrations of approx. 0.5 mg/ml, both dissolved in 9.5 M urea buffer (see above). Protofilaments and filament complexes are obtained by dialyzing the resulting polypeptide solution stepwise to a concentration of 4 M urea and then to low salt condition (50 mM NaCl, 2 mM dithiothreitol, 10 mM Tris-HCl, pH 7.4).

For immunization purposes, the solution can be further dialyzed against PBS (phosphate buffered saline, e.g. Dulbecco's PBS).

- Hatzfeld M. and Franke W.W. (1985). *J. Cell Biol.* 101, 1826-1841
- Hatzfeld M. et al. (1987). *J. Mol. Biol.* 197, 237-255

Cat. No.	62018	250 µg
	62218	100 µg