



Standard Human Keratin K8 (Recombinant)

Description	Recombinant human keratin K8 (formerly also designated cytokeratin 8)
Molecular Weight	53,532 (calculated from sequence) 52,500 (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 6.1
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)

References

- Krauss S. and Franke WW: Organization and sequence of the human gene encoding cytokeratin 8. *Gene* **86**:241-249 (1990)
Magin TM, Bader BL, Freudenmann M and Franke WW: De novo formation of cytokeratin filaments in calf lens cells and cytoplasts after transfection with cDNAs or microinjection with mRNAs encoding human cytokeratins. *Eur J Cell Biol* **53**:333-348 (1990)
Hofmann I, Franke WW. Heterotypic type I and type II cytokeratins in vitro: viscometry and determinations of relative affinities. *Eur J Cell Biol* **72**:122-132 (1997)
Herrmann H, Wedig T, Porter RM, Lane EB, Aebi U: Characterization of early assembly intermediates of recombinant human keratins. *J Struct Biol* **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.	62013	250 µg
	62213	100 µg