

Strep•Tag[®] References

A) Articles of general interest – reviews

1. Skerra, A. and Schmidt, T.G.M. (2000) *Meth. Enzymol.* **326**, 271–304. Use of the Strep-tag and streptavidin for recombinant protein purification and detection.
2. Skerra, A. and Schmidt, T.G.M. (1999) *Biomol. Eng.* **16**, 79–86. Applications of a Peptide Ligand for streptavidin: the Strep-tag.
3. Müller, H.N. and Schmidt, T.G.M. (2000) in Kastner, M. (Ed.), "Journal of Chromatography Library – volume 61, Protein Liquid Chromatography," Elsevier, ISBN 0 444 50210 6, pp. 825–837. Simple and fast one-step purification of recombinant proteins using the unique Strep-tag technology.
4. Schmidt, T.G.M. and Skerra, A. (2000) in Alberghina, L. (Ed.), "Protein Engineering in Industrial Biotechnology," Harwood Academic Publishers, ISBN: 90-5702-412-8, pp. 41–61. Protein Engineering for Affinity Purification: the Strep-tag.
5. Schmidt, T.G.M., Koepke, J., Frank, R., and Skerra, A. (1996) *J. Mol. Biol.* **255**, 753–766. Molecular interaction between the Strep-tag affinity peptide and its cognate target streptavidin.
6. Lamla, T., Mammeri, K., and Erdmann, V.A. (2001) *Acta Biochim. Pol.* **48**, 453–465. The cell-free protein biosynthesis – applications and analysis of the system.

B) Purification

After expression in mammalian cells

7. Ahrens, T., Lambert, M., Pertz, O., Sasaki, T., Schulthess, T., Mège, R.-M., Timpl, R., and Engel, J. (2003) *J. Mol. Biol.* **325**, 733–742. Homoassociation of VE-cadherin follows a mechanism common to 'classical' cadherins.
8. Ahrens, T., Pertz, O., Häussinger, D., Fauser, C., Schulthess, T., and Engel, J. (2002) *J. Mol. Biol.* **277**, 19455–19460. Analysis of heterophilic and homophilic interactions of cadherins using the c-Jun/c-Fos dimerization domains.
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11. Sardy, M., Karpati, S., Merkl, B., Paulsson, M., and Smyth, N. (2002) *J. Exp. Med.* **195**, 6: 747–757. Epidermal Transglutaminase (Tgase 3) Is the Autoantigen of Dermatitis Herpetiformis.
12. Murphy, J.T. and Lagarias, J.C. (1997) *Photochem. Photobiol.* **65**, 750–758. Purification and characterization of recombinant affinity peptide-tagged oat phytochrome A.

After expression in plant cells

13. Drucker, M., German-Retana, S., Espérandieu, P., LeGall O., and Blanc, S. (2002) *Biotech International* **June**, 6–18. Purification of a Viral Protein From Infected Plant Tissues Using The Strep-tag.

Protein complexes

14. Kleymann, G., Ostermeier, C., Ludwig, B., Skerra, A., and Michel, H. (1995) *Bio/Technology* **13**, 155–160. Engineered F_v fragments as a tool for the one-step purification of integral multisubunit membrane protein complexes.
15. Tsiotis, G., Haase, W., Engel, A., and Michel, H. (1995) *Eur. J. Biochem.* **231**, 823–830. Isolation and structural characterization of trimeric cyanobacterial photosystem I complex with the help of recombinant antibody fragments.
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Enzymes – metalloenzymes

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B) Purification (continued)

Secretion

28. Tudyka, T. and Skerra, A. (1997) *Protein Sci.* **6**, 2180–2187. Glutathione S-transferase can be used as a C-terminal, enzymatically active dimerization module for a recombinant protease inhibitor, and functionally secreted into the periplasm of *Escherichia coli*.

Membrane Proteins

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Crystallization

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Anticalins and antibody fragments

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Double tag, Strep-tag/6xHis-tag

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C) Detection

48. Kleymann, G., Ostermeier, C., Heitmann, K., Haase, W., and Michel, H. (1995) *J. Histochem. Cytochem.* **43**, 607–614. Use of antibody fragments (F_v) in immunochemistry.
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D) Assay

52. Skerra, A. and Schmidt, T.G.M. (2000) *Meth. Enzymol.* **326**, 271–304. Use of the Strep-tag and streptavidin for recombinant protein purification and detection.
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