

## Section 5C

### Experimental Uses for Epitope Tagging

Listed below are a sampling of publications that use epitopes for protein tagging. Most use c-myc, HA, or VSV-G epitope. The references are grouped under headings that describe their research objectives. The headings are the same as those used in Table 1B.1 on page 1.4 of this manual.

Consult these references for detailed examples of how epitope tagging can be applied to research questions.

#### Research objective: Subcellular localization of tagged proteins

Algrain, M., Turunen, O., Vaheri, A., Louvard, D. and Arpin, M. (1993) Ezrin contains cytoskeleton and membrane binding domains accounting for its proposed role as a membrane-cytoskeletal linker. *J. Cell Biol.* **120**:129–139.

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Canfield, V.A. and Levenson, R. (1993) Transmembrane organization of the Na,K-ATPase determined by epitope addition. *Biochemistry* **32**:13782–13786.

Chen, G., Shi, L., Litchfield, D.W. and Greenberg, A.H. (1995) Rescue from granzyme B-induced apoptosis by *Wee1* kinase. *J. Exp. Med.* **181**:2295–2300.

Cravchik, A. and Matus, A. (1993) A novel strategy for the immunological tagging of cDNA constructs. *Gene* **137**:139–143.

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## Research objective: Determination of protein- protein interactions

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## Research objective: Functional assay of tagged proteins

Ali, H., Richardson, R.M., Tomhave, E.D., Didsbury, J.R. and Snyderman, R. (1993) Differences in the phosphorylation of formylpeptide and the C5a chemoattractant receptors correlate with differences in desensitization. *J. Biol. Chem.* **268**:24747–24254.

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## Research objective: Tracking movement of tagged proteins within a cell

Berkower, C., Loayza, D. and Michaelis, S. (1994) Metabolic instability and constitutive endocytosis of STE6, the  $\alpha$ -factor transporter of *Saccharomyces cerevisiae*. *Mol. Biol. Cell* **5**:1185–1198.

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Ishii, K., Hayashi, H., Todaka, M., Kamohara, S., Kanai, F., Jinnouchi, H., Wang, L. and Ebina, Y. (1995) Possible domains responsible for intracellular targeting and insulin-dependent translocation of glucose transporter type 4. *Biochem J.* **309**:813–823.

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Wadzinski, B.E., Eisfelder, B.J., Peruski, L.F., Mumby, M.C. and Johnson, G.L. (1992)  $\text{NH}_2$ -terminal modification of the phosphatase 2A catalytic subunit allows functional expression in mammalian cells. *J. Biol. Chem.* **267**:16883–16888.

## Research objective: Characterization of new proteins

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