

Table S1. Antibodies used

| <b>Epitope</b>                   | <b>Code</b>          | <b>Source</b>   | <b>IP</b>       | <b>WB</b>       |
|----------------------------------|----------------------|---|-----------------|-----------------|
| AC3                              | AbAC3                | Santa Cruz Biotechnology, Inc. (SC-588)   | 1:17            | 1:200           |
| AC5/AC6*                         | AbAC6                | Santa Cruz Biotechnology, Inc. (SC-25500)   | 1:17            | 1:200           |
| AC9                              | AbAC9                | Santa Cruz Biotechnology, Inc. (SC-8576)  | 1:17            | 1:200           |
| All AC isoforms                  | AbACc                | Santa Cruz Biotechnology, Inc. (SC-1701)  | 1:17            | 1:200           |
| GFP                              | AbGFP                | AbCam (ab6556)  | NA              | 1:1,000         |
| AbIP <sub>3</sub> R1             | AbIP <sub>3</sub> R1 | Rabbit anti-IP <sub>3</sub> R1 peptide <sup>d</sup>   | 1:86            | 1:1,000         |
| AbIP <sub>3</sub> R2             | AbIP <sub>3</sub> R2 | Rabbit anti-IP <sub>3</sub> R2 peptide <sup>d</sup>   | 1:86            | 1:1,000         |
| AbIP <sub>3</sub> R3             | AbIP <sub>3</sub> R3 | BD Biosciences, monoclonal anti-peptide   | 1:86            | 1:1,000         |
| Phospho-Ser/Thr PKA substrate Ab | AbP                  | Cell Signaling Technology (9621)  | NA              | 1:1,000         |
| Epac-1                           |                      | S. Yarwood (Department of Biochemistry and Cell Biology, University of Glasgow, Scotland) <sup>a</sup>            | NA              | 1:1,000         |
| Epac-2                           |                      | Santa Cruz Biotechnology, Inc. (SC-9383)  | NA              | 1:1,000         |
| Gαs                              | CS1                  | G. Milligan (Department of Neuroscience and Molecular Pharmacology, University of Glasgow, Scotland) <sup>c</sup> | NA              | 1:500           |
| Ac-cAMP                          |                      | P. Marley <sup>b</sup>  | 1:9,000 for RIA | 1:9,000 for RIA |

The sources, codes, and concentrations of antisera used for IP, WB, or RIA. \*, AbAC6 recognizes both AC5 and AC6, but only AC6 is expressed in HEK cells (Table I). NA, not applicable.

<sup>a</sup>Borland, G., M. Gupta, M.M. Magiera, C.J. Rundell, S. Fuld, and S.J. Yarwood. 2006. Microtubule-associated protein 1B-light chain 1 enhances activation of Rap1 by exchange protein activated by cyclic AMP but not intracellular targeting. *Mol. Pharmacol.* 69:374–384.

<sup>b</sup>Marley, P.D., K.A. Thomson, K. Jachno, and M.J. Johnston. 1991. Histamine-induced increases in cyclic AMP levels in bovine adrenal medullary cells. *Br. J. Pharmacol.* 104:839–846.

<sup>c</sup>Milligan, G., and C.G. Unson. 1989. Persistent activation of the alpha subunit of Gs promotes its removal from the plasma membrane. *Biochem. J.* 260:837–841.

<sup>d</sup>Nerou, E.P., A.M. Riley, B.V.L. Potter, and C.W. Taylor. 2001. Selective recognition of inositol phosphates by subtypes of inositol trisphosphate receptor. *Biochem. J.* 355:59–69.