DEVELOPMENTAL STUDIES HYBRIDOMA BANK
dshb.biology.uiowa.edu | 319-335-3826 | dshb@uiowa.edu

**34C**
(Only cell products will be distributed.)

**INVESTIGATOR**

**Name** Judith Airey and John Sutko
**Address** Pharmacology/318, University of Nevada, Reno, Reno, NV 89557

**IMMUNOGEN**

| | |
|---|---|
| **Substance** | purified α and β ryanodine receptors |
| **Name** | |
| **Origin** | chicken skeletal muscle |
| **Chemical Composition** | |
| **Developmental Stage** | adult |

**IMMUNIZATION PROTOCOL**

| | |
|---|---|
| **Donor Animal** | |
| **Species** | mouse |
| **Strain** | BALB/c |
| **Sex** | |
| **Organ and tissue** | spleen |
| **Immunization** | |
| **Dates immunized** | 2/1/88, 2/22/88 |
| **Amount of antigen** | 350 mg/injection |
| **Route of immunization** | i.p. |
| **Adjuvant** | complete Freund's, followed by incomplete Freund's |

**FUSION**

| | |
|---|---|
| **Date** | 3/10/88 |
| **Myeloma cell line** | |
| **Species** | mouse |
| **Designation** | P3x63Ag8.653 |

**MONOCLONAL ANTIBODY**

| | |
|---|---|
| **Isotype** | IgG1 |
| **Specificity** | |
| **Cell binding** | |
| **Immunohistology** | |
| **Antibody competition** | |
| **Species Specificity** | mammalian, avian, amphibian, piscine-widely cross-reactive |

**ANTIGEN**

| | |
|---|---|
| **Chemical properties** | CHAPS - solubilized chicken α and β ryanodine receptors |
| **Molecular weight** | 2,300 kDa |
| **Characterization** | |
| **Immunoprecipitation** | yes |
| **Immunoblotting** | yes |
| **Purification** | yes |
| **Amino acid sequence analysis** | |
| **Functional effects** | |
| **Immunohistochemistry** | yes |

**PUBLICATIONS** :

Airey, J.A., Beck, C.F., Murakami, K., Tanksley, S.J., Deerinck, T.J., Ellisman, M.H. and Sutko, J.L. (1990). Identification and localization of two triad junctional foot protein isoforms in mature avian fast twitch skeletal muscle. J. Biol. Chem. 265, 14187-14194.

Kirkeby, S., and Hoyer, P.E. (1999). Binding properties of the galactose-detecting lectin Pseudomonas aeruginosa agglutinin (PA-IL) to skeletal muscle fibres. Quantitative precipitation and precipitation inhibition assays. Histochem. J. 31, 485-493.

(Continued)

**34C** (Continued)
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Beutner, G., Sharma, V.K., Giovannucci, D.R., Yule, D.I., and Sheu, S.S. (2001). Identification of a ryanodine receptor in rat heart mitochondria. J. Biol. Chem. 276(24), 21482-21488.

Murphy, R.M., and Lamb, G.D. (2009). Endogenous Calpain-3 activation is primarily governed by small increases in resting cytoplasmic [$Ca^{2+}$] and is not dependent on stretch. J. Biol. Chem. 284(12), 7811-7819.

## ACKNOWLEDGMENTS STATEMENT

We have been asked by NICHD to ensure that all investigators include an acknowledgment in publications that benefit from the use of the DSHB's products. We suggest that the following statement be used:

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