

Technical Data Sheet

Purified Mouse Anti-BRUCE**Product Information**

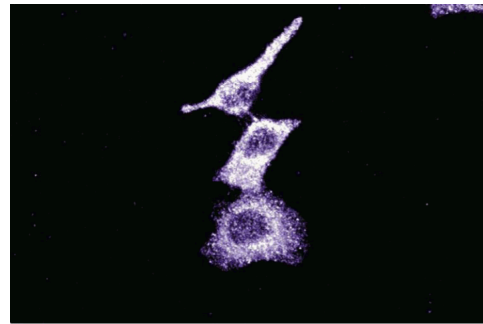
| | |
|-------------------------|--|
| Material Number: | 611193 |
| Alternate Name: | BIR Repeat containing Ubiquitin-Conjugating Enzyme |
| Size: | 150 µg |
| Concentration: | 250 µg/ml |
| Clone: | 4/BRUCE |
| Immunogen: | Mouse BRUCE aa. 372-571 |
| Isotype: | Mouse IgG1 |
| Reactivity: | QC Testing: Human Tested in Development: Mouse, Rat, Dog |
| Target MW: | 528 kDa |
| Storage Buffer: | Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide. |

Description

Selective proteolysis is essential for the modulation of key cellular processes such as cell cycle progression. However, unlike other post-translational events, proteolysis is irreversible and therefore must occur in unidirectional cellular pathways. In eukaryotes, proteolysis is mediated primarily by the ubiquitin pathway. This pathway designates proteins for degradation by the proteasome, a multicatalytic protease complex. The ubiquitin pathway is a multistep system that tags proteins for degradation via the attachment of ubiquitin molecules to the target. This attachment is mediated by the ubiquitin activating/conjugating enzymes E1, E2, E3, and BRUCE. BRUCE (BIR Repeat containing Ubiquitin-Conjugating Enzyme) is a novel enzyme that associates with the Golgi and the vesicular system. It contains a UBC (ubiquitin conjugating enzyme) domain, which is essential for catalysis, and a BIR (baculovirus inhibitor of apoptosis repeat) motif. BIR motifs are also found within inhibitor of apoptosis proteins (IAP) and are critical for anti-apoptotic activity. Therefore, BRUCE may function to both mediate ubiquitin-dependent proteolysis and contribute to anti-apoptotic cellular pathways.



Western blot analysis of BRUCE on a SW-13 cell lysate (Human adrenal gland carcinoma; ATCC CCL-105). Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-BRUCE antibody.



Immunofluorescence staining of HeLa cells (Human cervical epitheloid carcinoma; ATCC CCL-2.2).

Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes**Application**

| | |
|--------------------|---------------------------|
| Western blot | Routinely Tested |
| Immunofluorescence | Tested During Development |

BD Biosciences

bdbiosciences.com

| | | | | | |
|---------------|--------------|---------------|--------------|--------------|-------------------------|
| United States | Canada | Europe | Japan | Asia Pacific | Latin America/Caribbean |
| 877.232.8995 | 800.979.9408 | 32.53.720.550 | 0120.8555.90 | 65.6861.0633 | 55.11.5185.9995 |

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/support/resources/cell_biology/index.jsp

Clone 4/BRUCE has also been shown to work well for Western blot application on HeLa lysate (Cat. No. 611449)

Suggested Companion Products

| <u>Catalog Number</u> | <u>Name</u> | <u>Size</u> | <u>Clone</u> |
|-----------------------|----------------------------------|-------------|--------------|
| 611475 | SW-13 Cell Lysate | 500 µg | (none) |
| 554002 | HRP Goat Anti-Mouse Ig | 1.0 ml | (none) |
| 554001 | FITC Goat Anti-Mouse Ig | 0.5 mg | Polyclonal |
| 611449 | HeLa Cell Lysate | 500 µg | (none) |
| 353219 | BD Falcon™ 96-well Imaging Plate | NA | (none) |

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Hauser HP, Bardroff M, Pyrowolakis G, Jentsch S. A giant ubiquitin-conjugating enzyme related to IAP apoptosis inhibitors. *J Cell Biol.* 1998; 141(6):1415-1422. (Biology)

BD Biosciences

bdbiosciences.com

United States 877.232.8995 Canada 800.979.9408 Europe 32.53.720.550 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

