

Technical Data Sheet

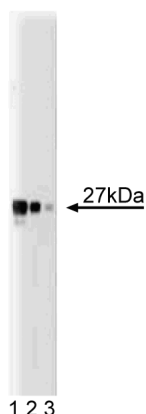
Purified Mouse Anti-Drp1**Product Information**

| | |
|-------------------------|--|
| Material Number: | 611738 |
| Alternate Name: | Density Regulated Protein-1 |
| Size: | 50 µg |
| Concentration: | 250 µg/ml |
| Clone: | 22/Drp1 |
| Immunogen: | Human Drp1 aa. 19-201 |
| Isotype: | Mouse IgG2a |
| Reactivity: | QC Testing: Human Tested in Development: Mouse, Rat, Dog |
| Target MW: | 27 kDa |
| Storage Buffer: | Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide. |

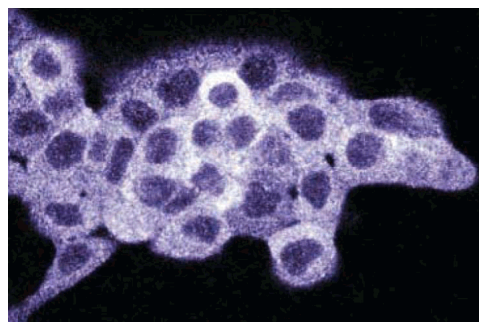
Description

In culture, cell density can have profound effects on gene expression, enzymatic activity, and cell signaling pathways. Using differential screening of cDNAs from low-passage nontumorigenic teratocarcinoma cells versus high passage tumorigenic cells, a protein was identified that is regulated in cell-density dependent manner. This protein, density-regulated protein 1 (drp1), contains putative sites for N-myristoylation and phosphorylation sites for cAMP and/or cGMP-dependent kinase, casein kinase II, and PKC. The expression of drp1 is enriched in high density cultures of both nontumorigenic and tumorigenic cell lines and is widely detected in adult organs, especially skeletal and cardiac muscle. In addition, increased expression of drp1 is not due to growth arrest as a result of serum starvation or TGF-β treatment nor is it a result of factors found in the media of high density cultures. Interestingly, drp1 is expressed highest in skeletal and cardiac muscle where unique cell-cell contacts are involved in muscle cell membrane depolarization and contraction. Thus, drp1 expression may be regulated by signaling pathways related to specific types of cell-cell contacts.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of Drp1 on a HCT-8 cell lysate (Human colorectal adenocarcinoma; ATCC CCL-244).
Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the mouse anti-Drp1 antibody.



Immunofluorescence staining on A431 cells (Human epithelial carcinoma; ATCC CRL-1555).

BD Biosciences

www.bdbiosciences.com

| | | | | | |
|----------------------|---------------|---------------|--------------|---------------------|--------------------------------|
| United States | Canada | Europe | Japan | Asia Pacific | Latin America/Caribbean |
| 877.232.8995 | 888.259.0187 | 32.53.720.550 | 0120.8555.90 | 65.6861.0633 | 55.11.5185.9995 |

For country-specific contact information, visit www.bdbiosciences.com/how_to_order/

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.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD



Preparation and Storage

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

Store undiluted at -20° C.

Application Notes

Application

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

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|----------------|--------------------------|--------|------------|
| 611474 | HCT-8 Cell Lysate | 500 µg | (none) |
| 554002 | HRP Goat Anti-Mouse Igs | 1.0 ml | (none) |
| 554001 | FITC Goat Anti-Mouse Igs | 0.5 mg | Polyclonal |

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.

References

Deyo JE, Chiao PJ, Tainsky MA. drp, a novel protein expressed at high cell density but not during growth arrest. *DNA Cell Biol.* 1998; 17(5):437-447.(Biology)

BD Biosciences

www.bdbiosciences.com

United States 877.232.8995 Canada 888.259.0187 Europe 32.53.720.550 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

For country-specific contact information, visit www.bdbiosciences.com/how_to_order/

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.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD

