# Product Datasheet

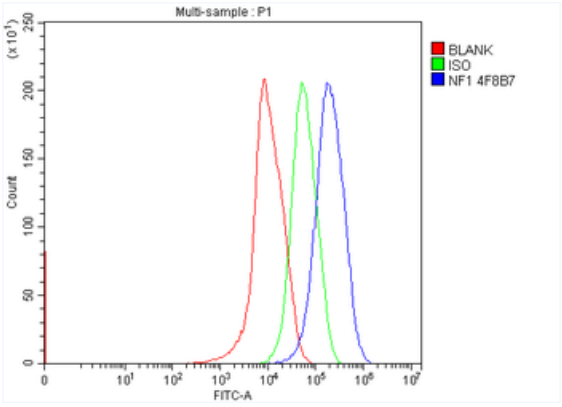
## Anti-Neurofibromin/NF1 Antibody (monoclonal, 4F8B7) (orb865677)

| | |
|---|---|
| **Catalog Number** | orb865677 |
| **Description** | Anti-Neurofibromin/NF1 Antibody (monoclonal, 4F8B7). Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. |
| **Species/Host** | Mouse |
| **Reactivity** | Human, Mouse, Rat |
| **Conjugation** | Unconjugated |
| **Tested Applications** | FC, ICC, IF, IHC, WB |
| **Immunogen** | E.coli-derived human Neurofibromin/NF1 recombinant protein (Position: R160-Q270). |
| **Form/Appearance** | Lyophilized |
| **Concentration** | Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Note** | For research use only |
| **Application notes** | Western blot, 0.25-0.5 µg/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 µg/ml, Human Flow Cytometry (Fixed), 1-3 µg/1x106 cells, Human. Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml |
| **Isotype** | Mouse IgG2a |
| **Clonality** | Monoclonal |

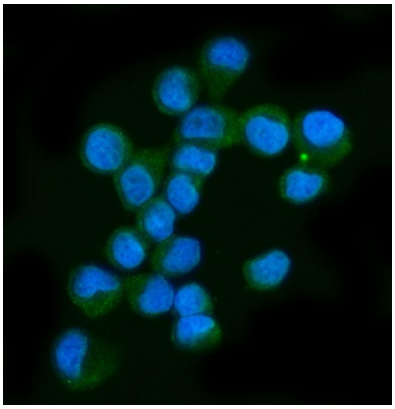
**Biorbyt Ltd.**
7 Signet Court, Swann's Road,
Cambridge, CB5 8LA, United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0) 1223 859-353 | Fax: +1 (415) 651-8558

**Biorbyt LLC.**
68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558

| | |
|---|---|
| **Clone Number** | 4F8B7 |
| **Antibody Type** | Primary Antibody |
| **MW** | 319 kDa |
| **Uniprot ID** | **P21359** |
| **Expiration Date** | 12 months from date of receipt. |



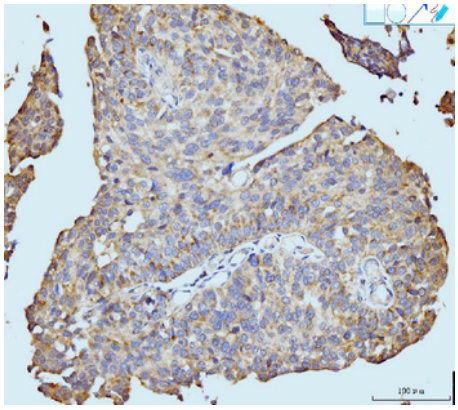

Flow Cytometry analysis of HepG2 cells using anti-Neurofibromin/NF1 antibody. Overlay histogram showing HepG2 cells (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Neurofibromin/NF1 Antibody (1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



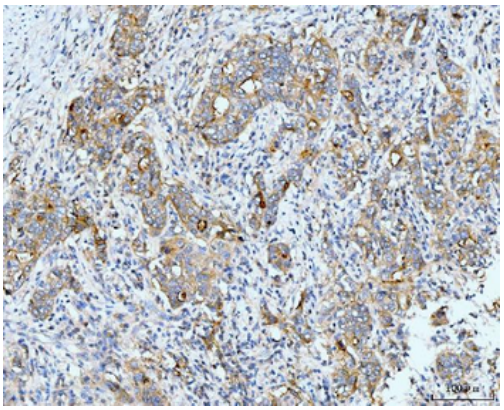
IF analysis of Neurofibromin/NF1 using anti-Neurofibromin/NF1 antibody. Neurofibromin/NF1 was detected in an immunocytochemical section of T-47D cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL mouse anti-Neurofibromin/NF1 Antibody overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

**Biorbyt Ltd.**
7 Signet Court, Swann's Road,
Cambridge, CB5 8LA, United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0) 1223 859-353 | Fax: +1 (415) 651-8558

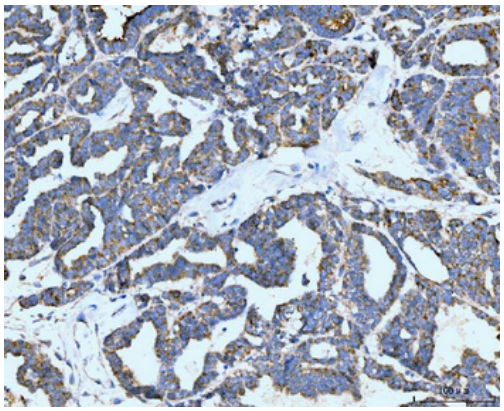
**Biorbyt LLC.**
68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558



IHC analysis of Neurofibromin/NF1 using anti-Neurofibromin/NF1 antibody. Neurofibromin/NF1 was detected in a paraffin-embedded section of human bladder epithelial carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Neurofibromin/NF1 Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



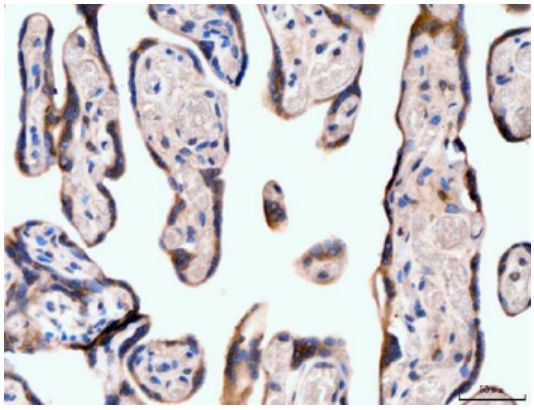
IHC analysis of Neurofibromin/NF1 using anti-Neurofibromin/NF1 antibody. Neurofibromin/NF1 was detected in a paraffin-embedded section of human metaplasia of squamous cells of the renal pelvis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Neurofibromin/NF1 Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



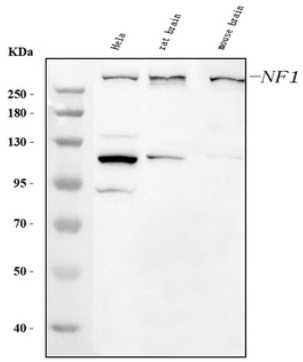
IHC analysis of Neurofibromin/NF1 using anti-Neurofibromin/NF1 antibody. Neurofibromin/NF1 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Neurofibromin/NF1 Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

**Biorbyt Ltd.**
7 Signet Court, Swann's Road,
Cambridge, CB5 8LA, United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0) 1223 859-353 | Fax: +1 (415) 651-8558

**Biorbyt LLC.**
68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558



IHC analysis of Neurofibromin/NF1 using anti-Neurofibromin/NF1 antibody. Neurofibromin/NF1 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Neurofibromin/NF1 Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.




Western blot analysis of Neurofibromin/NF1 using anti-Neurofibromin/NF1 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: rat brain tissue lysates, Lane 3: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Neurofibromin/NF1 antigen affinity purified monoclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Neurofibromin/NF1 at approximately 319 kDa. The expected band size for Neurofibromin/NF1 is at 319 kDa.

**Biorbyt Ltd.**
7 Signet Court, Swann's Road,
Cambridge, CB5 8LA, United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0) 1223 859-353 | Fax: +1 (415) 651-8558

**Biorbyt LLC.**
68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558