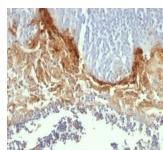


## CD104 / Integrin beta 4 Monoclonal Mouse Antibody (UM-A9)



### Product Description

CD104 is beta 4 integrin. It is primarily expressed in epithelial cells. Together with alpha 6 integrin, it is the cell surface receptor for laminin, where it mediates cell adhesion. Mutations in this gene are associated with epidermolysis bullosa with pyloric atresia.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0449, Anti-CD104 (UM-A9)**

### Product attributes

|                                       |  |
|---------------------------------------|--|
| Antibody number                       | #0449  |
| Antibody reactivity (target)          | CD104, integrin beta 4   |
| Antibody type                         | Primary  |
| Host species                          | Mouse  |
| Clonality                             | Monoclonal   |
| Clone                                 | UM-A9  |
| Isotype                               | IgG2a, kappa   |
| Molecular weight                      | 205 kDa  |
| Synonyms                              | CD104; Integrin beta 4; ITGB4; GP150   |
| Human gene symbol                     | ITGB4  |
| Entrez gene ID                        | 3691   |
| SwissProt                             | P16144   |
| Unigene                               | 632226   |
| Immunogen                             | Human squamous cell carcinoma (UM-SCC1)  |
| Antibody target cellular localization | Plasma membrane  |
| Species reactivity                    | Human  |
| Expected antibody applications        | Flow, surface (published for clone), Functional studies (published for clone), IF (published for clone), IP (published for clone)  |
| Antibody application notes            | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL, Biological blockade partially blocks laminin binding. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user |
| Positive control                      | A431 cells, squamous cell carcinoma, colon or placenta   |
| Shipping condition                    | Room temperature   |
| Storage Conditions                    | Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  |
| Shelf life                            | Guaranteed for at least 24 months from date of receipt when stored as recommended  |
| Regulatory status                     | For research use only (RUO)  |
| Antibody/conjugate formulation        | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide  |
| Antibody research areas               | Cancer, Immunology   |
| Product origin                        | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.  |
| Cell/tissue expression                | Epithelial cells   |

| Antibody # prefix | Conjugation        | Ex/Em (nm) | Laser line | Detection channel        | Dye Features                     |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04             | CF®405S            | 404/431    | 405        | DAPI (microscopy), AF405 | <a href="#">CF®405S Features</a> |
| BNC88             | CF®488A            | 490/515    | 488        | GFP, FITC                | <a href="#">CF®488A Features</a> |
| BNC68             | CF®568             | 562/583    | 532, 561   | RFP, TRITC               | <a href="#">CF®568 Features</a>  |
| BNC94             | CF®594             | 593/614    | 561        | Texas Red®               | <a href="#">CF®594 Features</a>  |
| BNC40             | CF®640R            | 642/662    | 633-640    | Cy®5                     | <a href="#">CF®640R Features</a> |
| BNC47             | CF®647             | 650/665    | 633-640    | Cy®5                     | <a href="#">CF®647 Features</a>  |
| BNC74             | CF®740             | 742/767    | 633-685    | 775/50                   | <a href="#">CF®740 Features</a>  |
| BNCB              | Biotin             | N/A        | N/A        | N/A                      |                                  |
| BNUB              | Purified           | N/A        | N/A        | N/A                      |                                  |
| BNUM              | Purified, BSA-free | N/A        | N/A        | N/A                      |                                  |

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

### References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Cancer Res (1991) 51(9):2395-402. (IP, functional studies)
2. Cancer Res (1997) 57(1), 38-42. (IP, Flow, IF)