



Plakophilin-1 Monoclonal Mouse Antibody (10B2)

Product Description

This antibody recognizes a protein of 75 kDa, identified as Plakophilin-1. Its epitope maps between aa 1-27 human Plakophilin-1. Plakophilins 1, 2, 3 and 4 (PKP1-4) influence development and participate in linking cadherins to cytoskeletal intermediate filaments. Plakophilins 1-4 contain arm-repeat (armadillo) domains and localize to nuclei and cell desmosomes (cell-cell junctions found in suprabasal layers of stratifying epithelia that undergo mechanical stress). Plakophilin 2 is important for desmosome assembly and is an essential morphogenic factor and architectural component of the heart. 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 to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 1441, Anti-Plakophilin-1 (10B2)**

| Product attributes | |
|---------------------------------------|--|
| Antibody number | #1441 |
| Antibody reactivity (target) | Plakophilin-1 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | 10B2 |
| Isotype | IgG1 |
| Molecular weight | 75 kDa |
| Synonyms | B6P; B; 6 protein; PKP1; Plakophilin-1 (ectodermal dysplasia/skin fragility syndrome) |
| Human gene symbol | PKP1 |
| Entrez gene ID | 5317 |
| SwissProt | Q13835 |
| Unigene | 497350 |
| Immunogen | N-terminus of human Plakophilin-1 protein (exact sequence is proprietary) |
| Antibody target cellular localization | Plasma membrane, Nucleus |
| Verified antibody applications | WB (verified) |
| Species reactivity | Human, Mouse |
| Antibody application notes | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user |
| Positive control | HaCat Cells. |
| 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 | Cell adhesion |
| Cell/tissue expression | Cardiac |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel |
|-------------------|--------------------|------------|------------|--------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 |
| 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 |

| Dye Features |
|----------------------------------|
| CF®405S Features |
| CF®488A Features |
| CF®568 Features |
| CF®594 Features |
| CF®640R Features |
| CF®647 Features |

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