

Connexin 32 Monoclonal Rat Antibody (R5.21C)

Product Description

This antibody recognizes a protein of 27-32 kDa, identified as Connexin 32. The connexin family of proteins forms hexameric complexes called connexons that facilitate movement of low molecular weight proteins between cells via gap junctions. Connexin proteins share a common topology of four transmembrane alpha-helical domains, two extracellular loops, a cytoplasmic loop and cytoplasmic N- and C-termini. Many of the key functional differences arise from specific amino-acid substitutions in the most highly conserved domains, the transmembrane and extracellular regions. Each of the approximately 20-connexin isoforms produces channels with distinct permeability and electrical and chemical sensitivities; therefore, one connexin usually cannot fully substitute for another.

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 1641, Anti-Connexin-32 (R5.21C)

Product attributes

| | |
|---------------------------------------|--|
| Antibody number | #1641 |
| Antibody reactivity (target) | Connexin-32 |
| Antibody type | Primary |
| Host species | Rat |
| Clonality | Monoclonal |
| Clone | R5.21C |
| Isotype | IgG2a |
| Molecular weight | 27-32 kDa |
| Synonyms | Charcot Marie Tooth neuropathy X linked; CMTX; CMTX1; Connexin-32; Cx32; GAP junction 28kDa liver protein; Gap junction beta-1 protein; Gap junction protein beta 1 32kD; GJB1 |
| Human gene symbol | Gjb1 |
| Entrez gene ID | 14618 (Mouse) |
| SwissProt | P28230 (Mouse) |
| Unigene | 21198 (Mouse) |
| Immunogen | Mouse liver DOC-JR-plasma membranes |
| Antibody target cellular localization | Plasma membrane |
| Species reactivity | Mouse, Rat |
| Expected antibody applications | IHC (frozen) (published for clone), IF (published for clone), IP (published for clone), WB (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: 1-2 ug/mL, Flow cytometry: 0.5-1 ug/million cells, Immunohistology (frozen) 0.5-1 ug/mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user |
| Positive control | MCF-7 Cells. Pancreas, Liver, Kidney, Stomach or Tonsil |
| 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 | Gap junctions |
| 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. |

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

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References

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

1. J Cell Biol (1986) 103 (3): 755-766. (WB)
2. Endocrinology (1993) 133: 2371-2378. (IF)
3. J Cell Sci (1994) 107: 955-967. (IP)
4. Int J Cancer (1997) 73: 479-485. (IHC, frozen)