



# 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](mailto: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)**

## 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)

### 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

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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