



# Cytokeratin 6 Monoclonal Mouse Antibody (KRT6/1702)

## Product Description

This MAb recognizes a protein of 56 kDa, identified as cytokeratin 6 (CK6). In humans, multiple isoforms of Cytokeratin 6 (6A-6F), encoded by several highly homologous genes, have distinct tissue expression patterns, and Cytokeratin 6A is the dominant form in epithelial tissue. The gene encoding human Cytokeratin 6A maps to chromosome 12q13, and mutations in this gene are linked to several inheritable hair and skin pathologies. Keratins 6 and 16 are expressed in keratinocytes, which are undergoing rapid turnover in the suprabasal region (also known as hyper-proliferation-related keratins). Keratin 6 is found in hair follicles, suprabasal cells of a variety of internal stratified epithelia, in epidermis, in both normal and hyper-proliferative situations. Epidermal injury results in activation of keratinocytes, which express CK6 and CK16. CK6 is strongly expressed in about 75% of head and neck squamous cell carcinomas. Expression of CK6 is particularly associated with differentiation. 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 1702, Anti-Cytokeratin 6 (KRT6/1702)**

Product attributes	
Antibody number	#1702
Antibody reactivity (target)	Cytokeratin 6
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	KRT6/1702
Isotype	IgG2a, kappa
Molecular weight	56 kDa
Synonyms	CK6A, CK6B, CK6C, CK6D, CK6E, Keratin Type II Cytoskeletal 6A, Keratin Type II Cytoskeletal 6B, Keratin Type II Cytoskeletal 6C, Keratin Type II Cytoskeletal 6D, Keratin Type II Cytoskeletal 6E, KRT6, KRT6A, KRT6B, KRT6C, KRT6D, KRT6E
Human gene symbol	KRT6A; KRT6B; KRT6C
Entrez gene ID	286887-KRT6C, 3853-KRT6A, 3854-KRT6B
SwissProt	P02538-KRT6A, P04259-KRT6B, P48668-KRT6C
Unigene	700779
Immunogen	Recombinant human full-length keratin 6 protein
Antibody target cellular localization	Cytoskeleton
Verified antibody applications	IHC (FFPE) (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: 0.5-1 ug/mL, Immunohistochemistry (formalin) 0.1-0.2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	Tonsil or basal cell carcinoma
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, Cytoskeleton
Cell/tissue expression	Epidermal cells
Tumor expression	Squamous cell carcinoma

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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