Product Datasheet

Cytokeratin 14 Antibody (SPM263) [Allophycocyanin]
NBP2-34403APC

Unit Size: 0.1 ml

Store at 4C in the dark.

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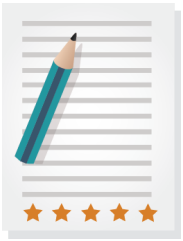
Updated 10/23/2024 v.20.1



NBP2-34403APC

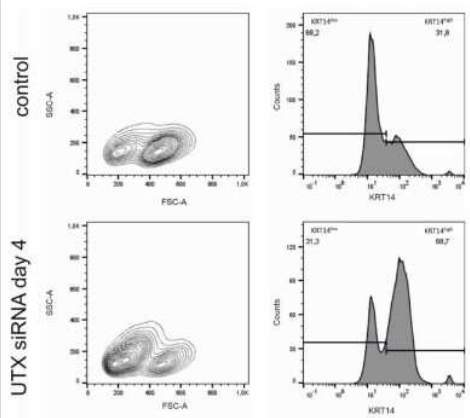
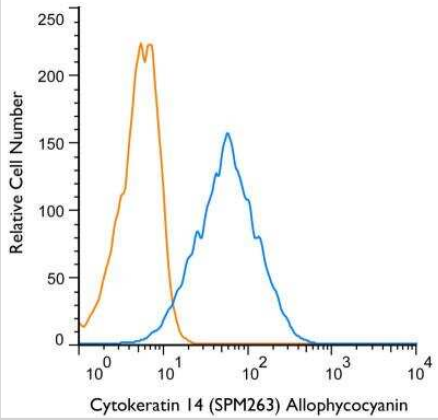
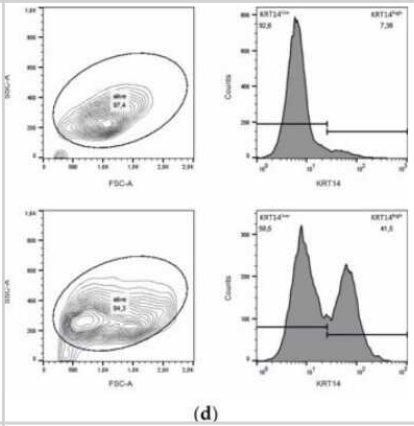
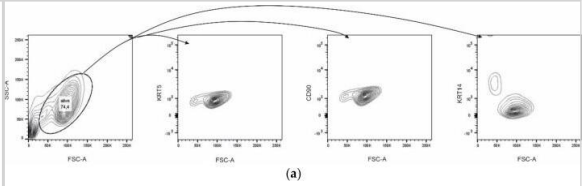
Cytokeratin 14 Antibody (SPM263) [Allophycocyanin]

Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	SPM263
Preservative	0.05% Sodium Azide
Isotype	IgG3 Kappa
Conjugate	Allophycocyanin
Purity	Protein A or G purified
Buffer	PBS

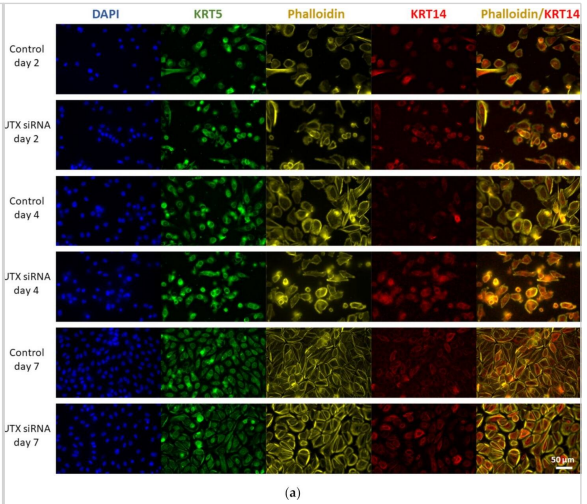
Product Description	
Description	This conjugate is made on demand. Actual recovery may vary from the stated volume of this product. The volume will be greater than or equal to the unit size stated on the datasheet.
Host	Mouse
Gene ID	3861
Gene Symbol	KRT14
Species	Human, Mouse, Rat
Marker	Squamous Cell Marker
Specificity/Sensitivity	Cytokeratin 14 (CK14) belongs to the type I (or A or acidic) subfamily of low molecular weight keratins and exists in combination with keratin 5 (type II or B or basic). CK14 is found in basal cells of squamous epithelia, some glandular epithelia, myoepithelium, and mesothelial cells. Anti-CK14 is useful in differentiating squamous cell carcinomas from poorly differentiated epithelial tumors. Anti-CK14 is one of the specific basal markers for distinguishing between basal and non-basal subtypes of breast carcinomas. Anti-CK14 is also a good marker for differentiation of intraductal from invasive salivary duct carcinoma by the positive staining of basal cells surrounding the in-situ neoplasm as well as for differentiation of benign prostate from prostate carcinoma. Furthermore, this antibody has been useful in separating oncocytic tumors of the kidney from its renal mimics, and in identifying metaplastic carcinomas of the breast.
Immunogen	A synthetic peptide of 15 amino acid from the C-terminus of human Cytokeratin 14. (Uniprot: P02533)

Product Application Details	
Applications	Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, CyTOF-ready
Recommended Dilutions	Flow Cytometry, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin, Flow (Intracellular), CyTOF-ready

Images

Flow Cytometry: Cytokeratin 14 Antibody (SPM263) [Allophycocyanin] [NBP2-34403APC] - Enrichment of Cytokeratin 14 (high cells after UTX knockdown in HBLAK cells. Cytokeratin 14 expression as detected by flow cytometry on day 4 after transfection of control siRNA or UTX-siRNA (n = 4). Statistics were performed with a two-way ANOVA with a post-hoc Tukey HSD test (## p < 0.01; ### p < 0.001). Image collected and cropped by CiteAb from the following publication (https://www.mdpi.com/2072-6694/12/4/1023/htm), licensed under a CC-BY license.	
Flow Cytometry: Cytokeratin 14 Antibody (SPM263) [Allophycocyanin] [NBP2-34403APC] - An intracellular stain was performed on HeLa cells with Cytokeratin 14 (SPM263) antibody NBP2-34403APC (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to allophycocyanin.	
Flow Cytometry: Cytokeratin 14 Antibody (SPM263) [Allophycocyanin] [NBP2-34403APC] - Effects of UTX knockdown on BFTC-905 urothelial carcinoma cells. FACS analysis of cell size and Cytokeratin 14 expression. Note the shift towards smaller cells in the FSC-A channel and an increased fraction of Cytokeratin 14 high cells. Number of analyzed experiments n = 3. Image collected and cropped by CiteAb from the following publication (https://www.mdpi.com/2072-6694/12/4/1023), licensed under a CC-BY license.	
Flow Cytometry: Cytokeratin 14 Antibody (SPM263) [Allophycocyanin] [NBP2-34403APC] - HBLAK contains two cell populations. (a) HBLAK cells homogeneously express CD90 & KRT5, but two subpopulations are distinguishable by size & KRT14 staining; namely, FSC-Alow/KRT14high & FSC-Ahigh/KRT14low. (b) The larger KRT14low cells are more intensely labeled by EdU staining. (c) The FSC-Ahigh/KRT14low population is additionally distinguishable by high AldeFluor-assay activity. In (a–c), evaluated cells are circled. (d) Effect of UTX knockdown using siRNA 01 on the proportion of the AldeFluorpos population. As a negative control, DEAB reagent (inhibitor of the AldeFluor-assay) was used. Significant differences were observed 4 & 7 days after transfection of control siRNA or UTX-siRNA. Number of analyzed independent experiments, n = 4. Statistics were performed with a one-way ANOVA with a post-hoc Tukey HSD test (# p < 0.05). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32326336), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Flow Cytometry: Cytokeratin 14 Antibody (SPM263) [Allophycocyanin] [NBP2-34403APC] - Enrichment of KRT14high cells after UTX knockdown in HBLAK cells. (a) Immunocytochemical detection of KRT5 & KRT14, nuclei with DAPI & F-actin with phalloidin after transfection with UTX-siRNA for 2, 4 or 7 days. (b) Quantification of KRT14high cells via a cell structure-related signal threshold analysis (ImageJ) in the HBLAK population following UTX knockdown. At least three experiments with >50 cells each were evaluated for each treatment & time point. The percentage of KRT14high cells was measured via ImageJ analysis, as described in the Methods section. (c) KRT14 expression as detected by flow cytometry on day 4 after transfection of control siRNA or UTX-siRNA (n = 4). Statistics were performed with a two-way ANOVA with a post-hoc Tukey HSD test (## p < 0.01; ### p < 0.001). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32326336), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Lang A, Whongsiri P, et al. Knockdown of UTX/KDM6A Enriches Precursor Cell Populations in Urothelial Cell Cultures and Cell Lines. Cancers (Basel) 2020-04-21 [PMID: 32326336] (FLOW, Human)

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NB100-355	RPE65 Antibody (401.8B11.3D9) - BSA Free

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