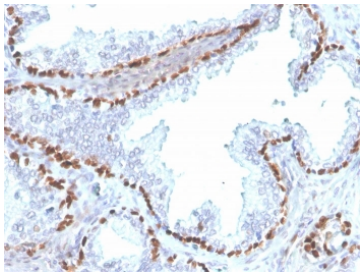
p40 Antibody for FACS / deltaNp63 Flow Cytometry Antibody [clone rTP40/3690] (V8627)

Catalog No.	Formulation	Size
V8627-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8627-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8627SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

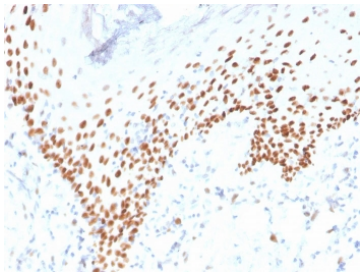
Recombinant MOUSE MONOCLONAL

Bulk quote request

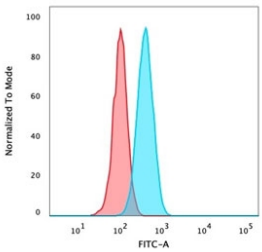
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rTP40/3690
Purity	Protein G affinity chromatography
UniProt	Q9H3D4
Localization	Nuclear
Applications	Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This recombinant p40 antibody is available for research use only.



p40 Antibody. Immunohistochemistry analysis of Tumor protein p40 (deltaNp63) in FFPE human kidney tissue using a p40 antibody (clone rTP40/3690) demonstrates distinct HRP-DAB brown nuclear staining in epithelial cells lining tubular structures, while surrounding stromal and non-epithelial cells remain largely negative. The nuclear-restricted staining pattern is consistent with the localization of deltaNp63 as a transcription factor and highlights epithelial cell compartments within the kidney. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



IHC staining of FFPE human skin with recombinant p40 antibody (clone rTP40/3690). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



p40 Antibody for FACS. Flow cytometry analysis of PFA-fixed and permeabilized human HeLa cells using a p40 Antibody for FACS (clone rTP40/3690) demonstrates a clear rightward shift in fluorescence intensity for the deltaNp63-stained population (blue) compared to the isotype control (red). This separation indicates specific intracellular detection of Tumor protein p40 (deltaNp63) with minimal background signal. The distinct population shift supports accurate gating and quantification of p40-positive cells, consistent with nuclear expression of deltaNp63 following permeabilization. The recombinant mouse monoclonal format provides clean signal resolution and reproducible performance in flow cytometry-based detection of epithelial lineage-associated transcription factors.

Description

Tumor protein p40, corresponding to the deltaNp63 isoform of TP63, is a nuclear transcription factor that plays a central role in squamous epithelial differentiation and maintenance of basal cell identity. p40 Antibody for FACS is specifically designed for intracellular flow cytometry applications, where fixation and permeabilization enable detection of nuclear deltaNp63 and conversion of lineage-associated expression into a quantitative, population-level readout. This format allows researchers to measure and compare p40 expression across thousands of individual cells rather than relying solely on morphology-based interpretation.

p40 antibody, also known as deltaNp63 antibody in the literature, is highly specific for the deltaNp63 isoform and does not detect TAp63 variants. This isoform specificity is especially important in flow cytometry, where signal must be interpreted numerically and non-specific detection can distort population analysis. p40 Antibody for FACS enables precise identification of squamous and basal-like cell populations within mixed samples, supporting accurate gating and quantification of deltaNp63-positive cells.

The FACS differentiator is particularly powerful because it transforms p40 from a qualitative lineage marker into a quantitative analytical tool. Instead of visualizing staining within tissue, researchers can determine the percentage of p40-positive cells, compare expression levels between conditions, and identify subpopulations with distinct deltaNp63 expression profiles. This is especially valuable in studies of tumor heterogeneity, epithelial lineage commitment, and experimental models of differentiation.

Clone rTP40/3690 is a recombinant mouse monoclonal antibody, providing consistent epitope recognition and reproducible signal across experiments. In flow cytometry, where small shifts in fluorescence intensity can affect gating strategies, this consistency is critical. The monoclonal format supports clean intracellular staining, while the recombinant design minimizes variability between lots, ensuring reliable comparison across datasets.

In FACS workflows, nuclear targets such as deltaNp63 require optimized fixation and permeabilization conditions to preserve antigen integrity while allowing antibody access. Once optimized, p40 Antibody for FACS produces a clear separation between positive and negative populations, enabling accurate gating and robust statistical analysis. This makes it particularly useful for studying epithelial tumor cell lines, basal-like populations, and changes in lineage-associated transcription factor expression under different experimental conditions.

p40 Antibody for FACS is especially well suited for applications where population-level measurement is essential, including monitoring differentiation states, evaluating tumor cell subsets, and assessing changes in epithelial identity. Its isoform specificity ensures that measured signal reflects deltaNp63 biology rather than total TP63 expression.

Tumor protein p40 antibody clone rTP40/3690 provides a high-value tool for intracellular flow cytometry, combining deltaNp63 specificity, recombinant monoclonal reproducibility, and quantitative cell population analysis for studies of epithelial biology, tumor heterogeneity, and lineage-specific expression.

Application Notes

Optimal dilution of the p40 Antibody for FACS / deltaNp63 Flow Cytometry Antibody should be determined by the researcher.

Immunogen

A synthetic peptide from the N-terminal of human p40 protein was used as the immunogen for the p40 Antibody for FACS / deltaNp63 Flow Cytometry Antibody.

Storage

Store the recombinant p40 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

p40 flow cytometry antibody, deltaNp63 FACS antibody, p40 intracellular staining antibody, deltaNp63 nuclear flow antibody

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