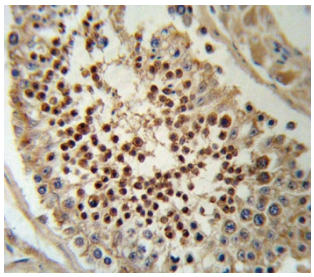
Krueppel-Like Factor 5 Antibody / BTEB2 Antibody (F54921)

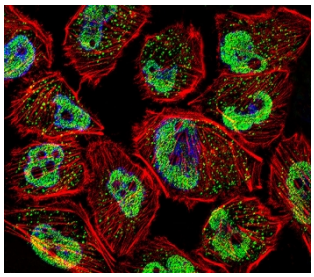
Catalog No.	Formulation	Size
F54921-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54921-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

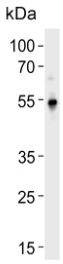
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q13887
Localization	Nuclear
Applications	Western blot: 1:500-1:1000 Immunofluorescence: 1:10-1:50 Flow cytometry: 1:10-1:50 (1x10e6 cells) Immunohistochemistry (FFPE): 1:10-1:50
Limitations	This Krueppel-Like Factor 5 Antibody / BTEB2 Antibody is available for research use only.



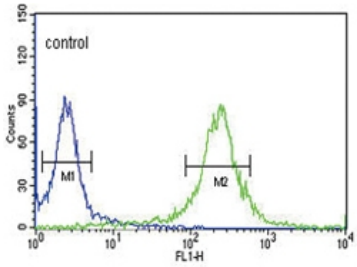
Krueppel-Like Factor 5 Antibody Human Testis IHC. Immunohistochemical staining of FFPE human testis tissue using Krueppel-Like Factor 5 Antibody. Heat-induced epitope retrieval was performed in pH 6.0 citrate buffer prior to incubation with the primary antibody overnight at 4Â°C. An HRP-conjugated secondary antibody with DAB chromogen was used for visualization. Strong nuclear staining is observed within spermatogenic cells of the seminiferous tubules, with minimal background staining in the surrounding interstitial tissue, consistent with the expected localization of the KLF5 transcription factor in proliferating germ cells. These results demonstrate that Krueppel-Like Factor 5 Antibody, a BTEB2 Antibody, specifically detects endogenous KLF5 in FFPE human testis tissue.



Krueppel-Like Factor 5 Antibody Human U-251 Cell IF. Immunofluorescent staining of fixed and permeabilized human U-251 cells using Krueppel-Like Factor 5 Antibody (green). Actin filaments were co-stained with an anti-actin antibody (red), and nuclei were counterstained with DAPI (blue). KLF5 immunoreactivity is concentrated predominantly within the nuclei, with weaker punctate cytoplasmic staining, while the actin cytoskeleton clearly outlines cell morphology. These results demonstrate that Krueppel-Like Factor 5 Antibody, a BTEB2 Antibody, specifically detects endogenous KLF5 in human glioblastoma cells and confirms the expected nuclear localization of this transcription factor.



Krueppel-Like Factor 5 Antibody Human CCRF-CEM Cell WB. Western blot testing of human CCRF-CEM cell lysate using Krueppel-Like Factor 5 Antibody. A distinct band is detected at approximately 55 kDa, consistent with one of the reported KLF5 isoforms and the known electrophoretic migration of the protein. Although the predicted molecular weight ranges from approximately 34-51 kDa due to multiple isoforms, post-translational modifications may contribute to a higher apparent molecular weight. These results demonstrate that Krueppel-Like Factor 5 Antibody, a BTEB2 Antibody, specifically detects endogenous KLF5 in human CCRF-CEM cells.



Krueppel-Like Factor 5 Antibody Human HeLa Cell FACS. Flow cytometric analysis of fixed and permeabilized human HeLa cells using Krueppel-Like Factor 5 Antibody. Blue: isotype control. Green: Krueppel-Like Factor 5 Antibody. The clear rightward shift of the green histogram relative to the isotype control demonstrates specific intracellular detection of endogenous KLF5. These results show that Krueppel-Like Factor 5 Antibody, a BTEB2 Antibody, is suitable for flow cytometric analysis of KLF5 expression in human epithelial cells.

Description

Krueppel-Like Factor 5 Antibody recognizes KLF5, also known as BTEB2 (Basic Transcription Element-Binding Protein 2), a zinc finger transcription factor that regulates genes controlling epithelial proliferation, differentiation, tissue repair, and organ development. KLF5 is one of the best-characterized members of the Kruppel-like factor family and is highly expressed in proliferative epithelial tissues, including the intestine, skin, mammary gland, lung, and prostate. By binding GC-rich promoter elements, KLF5 coordinates transcriptional programs that maintain epithelial homeostasis while supporting normal tissue renewal and regeneration. Consequently, Krueppel-Like Factor 5 Antibody is widely used to investigate epithelial biology, transcriptional regulation, and tissue-specific gene expression.

KLF5 functions as an important downstream effector of numerous signaling pathways, including epidermal growth factor, transforming growth factor beta, Wnt, Hippo, and mitogen-activated protein kinase signaling. Depending on cellular context, KLF5 promotes proliferation, regulates differentiation, supports stem cell maintenance, and coordinates responses to tissue injury. The activity of KLF5 is tightly regulated through phosphorylation, acetylation, ubiquitination, and protein-protein interactions that influence transcriptional activity and protein stability. These diverse regulatory mechanisms have established Krueppel-Like Factor 5 Antibody as a valuable reagent for studying epithelial regeneration, developmental biology, stem cell function, and signaling-dependent transcriptional control.

Abnormal KLF5 expression has been associated with numerous human diseases, particularly epithelial cancers. Altered KLF5 activity has been reported in colorectal, gastric, breast, prostate, pancreatic, bladder, lung, and esophageal cancers, where it influences tumor growth, invasion, survival, and therapeutic response. Outside oncology, KLF5 contributes to cardiovascular remodeling, vascular smooth muscle proliferation, fibrosis, inflammation, and metabolic regulation. These diverse biological functions have made BTEB2 Antibody an important tool for researchers investigating disease mechanisms, biomarker discovery, and therapeutic target validation. Applications including Western blotting, immunohistochemistry, immunofluorescence, immunoprecipitation, and flow cytometry are commonly used to

characterize KLF5 expression and localization in normal and pathological tissues.

NSJ Bioreagents offers Krueppel-Like Factor 5 Antibody products for reliable detection of KLF5 across a broad range of research applications. Whether studying epithelial differentiation, developmental biology, cancer progression, stem cell regulation, or transcription factor signaling, a high-quality BTEB2 Antibody provides dependable detection of this important zinc finger transcription factor. For additional antibodies targeting the KLF5 gene product, including products emphasizing its role as an epithelial transcription factor, visit our KLF5 Antibody / Epithelial Transcription Factor Antibody page.

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Application Notes

The stated application concentrations are suggested starting points. Titration of the Krueppel-Like Factor 5 Antibody / BTEB2 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 341-370 from the human protein was used as the immunogen for the Krueppel-like factor 5 antibody.

Storage

Aliquot the Krueppel-like factor 5 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Krueppel-Like Factor 5 antibody, BTEB2 antibody, KLF5 antibody, Basic Transcription Element-Binding Protein 2 antibody, IKLF antibody, CKLF antibody

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