abcam

ab123880

Anti-IRF6 antibody [OTI2A12]

Key facts

Isotype	IgG2b
Host species	Mouse
Storage buffer	pH: 7.3 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human IRF6. Database link O14896
Clone number	OTI2A12
Purification technique	Affinity purification
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from cell culture supernatant by affinity chromatography.

Reactivity data

WB

Tested

Species	Human
Dilution info	1/2000
Notes	-

Expected

Species	African green monkey
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell line
Dilution info	-
Notes	-

ICC/IF

Tested

Species	African green monkey
Dilution info	1/100
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell line
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Transfected cell line
Dilution info	1/100
Notes	ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

Expected

Species	Human, African green monkey
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/150
Notes	-

Expected

Species	African green monkey
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell line
Dilution info	-
Notes	-

Target data

See full target information IRF6

Function	Probable DNA-binding transcriptional activator. Key determinant of the keratinocyte proliferation-differentiation switch involved in appropriate epidermal

development (By similarity). Plays a role in regulating mammary epithelial cell proliferation (By similarity). May regulate WDR65 transcription (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Interferon Regulatory Factor 6 (IRF6) is a transcription factor known for its role in the regulation of gene expression involved in developmental processes. It weighs approximately 53 kDa and it is part of the IRF family of transcription factors. This protein is predominantly found in the epithelial tissues where it plays a critical role in keratinocyte differentiation and proliferation. The expression of IRF6 can be observed in several tissues but it is especially important in the oral epithelium skin and hair follicles.
Biological function summary	IRF6 orchestrates various cellular activities essential for tissue development and repair. It functions as a transcriptional activator influencing the expression of genes involved in the morphogenesis of craniofacial structures. IRF6 does not form large protein complexes but rather exerts its function through interaction with DNA and possibly with other transcription factors. It contributes to epithelial differentiation and proliferation balancing growth and apoptosis in tissues.
Pathways	IRF6 participates significantly in the Wnt and Notch signaling pathways. Both pathways are critical for regulating cell fate and development processes. The Notch pathway influences differentiation in the epithelial cells while the Wnt pathway is key for controlling the balance between growth and differentiation. IRF6 interacts with proteins such as RIPK4 which mediates signaling important for preventing excessive proliferation by promoting differentiation processes.
Associated diseases and disorders	IRF6 mutations link to conditions such as Van der Woude syndrome and orofacial clefting which involve developmental anomalies in facial structures. These mutations may disrupt normal protein function impacting critical pathways and their downstream effects. IRF6 dysfunction in these disorders may also involve interactions with other proteins like p63 influencing epithelial development negatively and contributing to the clinical manifestations observed in these conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

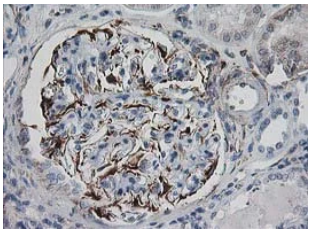
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

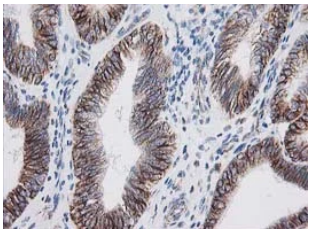
7 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF6 antibody [OTI2A12] (ab123880)

IRF6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-IRF6 antibody

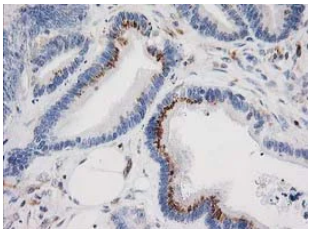
Paraffin-embedded human kidney tissue stained for IRF6 using ab123880 at 1/150 dilution in immunohistochemical analysis.



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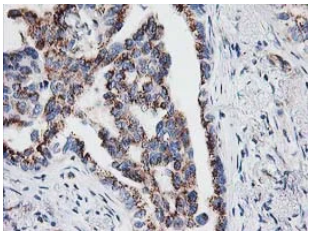
Paraffin-embedded human endometrium adenocarcinoma tissue stained for IRF6 using ab123880 at 1/150 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRF6 antibody [OTI2A12] (ab123880)

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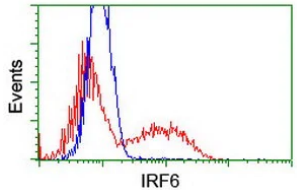
Paraffin-embedded human colon adenocarcinoma tissue stained for IRF6 using ab123880 at 1/150 dilution in immunohistochemical analysis.



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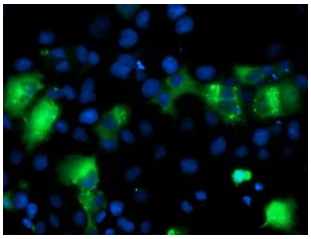
Paraffin-embedded human lung carcinoma tissue stained for IRF6 using ab123880 at 1/150 dilution in immunohistochemical analysis.



Flow Cytometry (Intracellular) - Anti-IRF6 antibody [OTI2A12] (ab123880)

IRF6 Flow Cytometry (Intracellular) staining using mouse Anti-IRF6 antibody

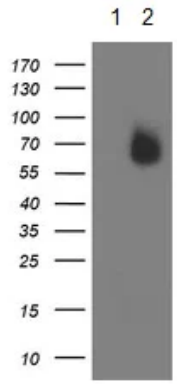
Flow cytometric analysis of HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cells transfected with either pCMV6-ENTRY IRF6 overexpress plasmid (Red), or empty vector control plasmid (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-IRF6 antibody [OTI2A12] (ab123880)

IRF6 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-IRF6 antibody

COS-7 (African green monkey kidney fibroblast-like cell line) cells transiently transfected using pCMV6-ENTRY IRF6 stained for IRF6 (green) in ICC/IF.



Western blot - Anti-IRF6 antibody [OTI2A12] (ab123880)

All lanes:
Western blot - Anti-IRF6 antibody [OTI2A12] (ab123880) at 1/2000 dilution

Lane 1:
HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cells transfected with pCMV6-ENTRY control cDNA at 5 µg

Lane 2:
HEK-293T cells transfected with pCMV6-ENTRY IRF6 cDNA at 5 µg

Predicted band size: 53 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.