abcam

ab175431

Anti-Rex1 antibody [5E11E7]

Mouse Monoclonal Rex1 antibody. Suitable for Flow Cyt, WB, IHC-P and reacts with Human, Transfected cell lysate - Human samples. Cited in 3 publications. Immunogen corresponding to Recombinant Fragment Protein within Human ZFP42 aa 200 to C-terminus.

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human ZFP42 aa 200 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link Q96MM3
Clone number	5E11E7
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

WB

Tested

Species	Transfected cell lysate - Human
Dilution info	1/500 - 1/2000
Notes	-

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

Target data

See full target information ZFP42

Function	Involved in the reprogramming of X-chromosome inactivation during the acquisition of pluripotency. Required for efficient elongation of TSIX, a non-coding RNA antisense to XIST. Binds DXPas34 enhancer within the TSIX promoter. Involved in ES cell self-renewal (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
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	Rex1 also known as Zfp42 is a transcription factor and zinc finger protein with a mass of approximately 42 kDa. This protein is expressed mostly in embryonic stem cells and some adult stem cells. Rex1 functions by binding to DNA sequences influencing gene expression that is essential for maintaining stem cell self-renewal and pluripotency. As a result Rex1 plays an important role in regulating cellular processes related to developmental potential.
Biological function summary	Rex1 influences stem cell pluripotency and differentiation. It is part of the network of pluripotency factors along with Oct4 Sox2 and Nanog. These proteins form a regulatory circuit that maintains embryonic stem cell identity. Rex1 directly interacts with chromatin structure facilitating the accessibility of specific genes related to stem cell maintenance and identity. The expression levels of Rex1 have a significant impact on the transition between pluripotency and differentiated states within cells.
Pathways	Rex1 is involved in key signaling pathways regulating pluripotency like the LIF/STAT3 and Wnt signaling pathways. Within these pathways Rex1 collaborates with other transcription factors to promote the expression of genes required for

	stem cell growth and maintenance. Rex1 and Nanog work closely in these pathways to sustain the pluripotent status of stem cells by activating necessary genetic programs and preventing differentiation signals.
Associated diseases and disorders	Rex1 has connections to certain cancers such as teratocarcinomas due to its role in maintaining pluripotency. Another protein Oct4 often has elevated levels alongside Rex1 in these cancerous cells which drives the tumor's stem-like characteristics. Rex1 levels have been associated with tumor formation and progression in some cancer types suggesting that it could be a biomarker for cancer stem cells and a potential target for therapies.

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

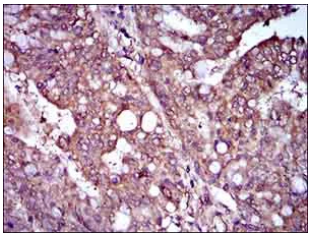
We do not recommend this combination. It is not covered by our product promise.

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.

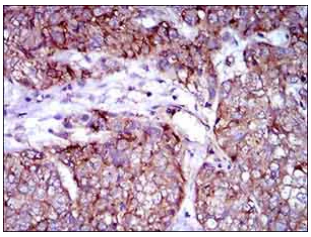
3 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rex1 antibody [5E11E7] (ab175431)

Rex1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Rex1 antibody

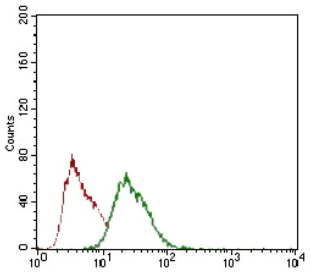
Immunohistochemical analysis of paraffin-embedded Human rectum cancer tissue labeling Rex1 with ab175431 at 1/200 dilution with DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rex1 antibody [5E11E7] (ab175431)

Rex1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Rex1 antibody

Immunohistochemical analysis of paraffin-embedded Human esophagus cancer tissue labeling Rex1 with ab175431 at 1/200 dilution with DAB staining.



Flow Cytometry - Anti-Rex1 antibody [5E11E7] (ab175431)

Rex1 Flow Cytometry staining using mouse Anti-Rex1 antibody

Flow cytometric analysis of HEK293 cells labeling Rex1 with ab175431 at 1/200 dilution (green) compared to a negative control (red).

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