abcam

Product datasheet

Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade ab175932

リコンビナント RabMAb

2 Abreviews 57 References 画像数 18

製品の概要

製品名	Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade
製品の詳細	Rabbit monoclonal [EPR5554(N)] to NRF1 - ChIP Grade
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), ChIP, WB, ICC/IF, IP, ChIC/CUT&RUN-seq, IHC-P, ChIP-sequencing
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide within Human NRF1 aa 350-450 (Cysteine residue). The exact sequence is proprietary. Database link: **Q16656**
ポジティブ・コントロール	WB: MCF-7, HeLa and 293T cell lysates and human fetal heart, mouse heart, mouse brain, rat heart and rat brain tissue lysates. IHC-P: Human gastric adenocarcinoma, human cervical carcinoma and human skeletal muscle tissues. ICC/IF: HeLa and MCF-7 cells. Flow Cyt (intra): 293T cells. IP: 293T cell lysate. ChIP-Seq: HeLA cells.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル

クローン名	EPR5554(N)
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab175932の使用に適用されます

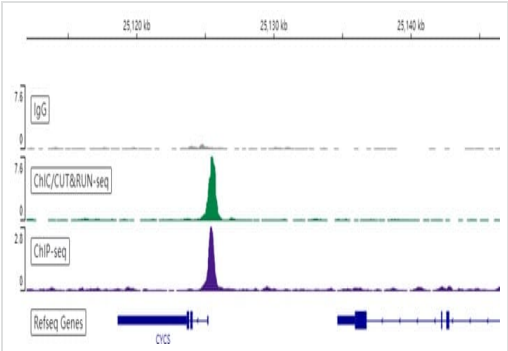
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/10 - 1/150. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ChIP		Use at an assay dependent concentration.
WB	★★★★☆ (2)	1/1000 - 1/10000. Predicted molecular weight: 54 kDa.
ICC/IF		1/50 - 1/100.
IP		1/10 - 1/100.
ChIC/CUT&RUN-seq		Use at an assay dependent concentration. 5 µg
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
ChIP-sequencing		Use 8µg for 10^7 cells.

ターゲット情報

機能	Transcription factor that activates the expression of the EIF2S1 (EIF2-alpha) gene. Links the transcriptional modulation of key metabolic genes to cellular growth and development. Implicated in the control of nuclear genes required for respiration, heme biosynthesis, and mitochondrial DNA transcription and replication.
組織特異性	Ubiquitously expressed with strongest expression in skeletal muscle.
配列類似性	Belongs to the NRF1/Ewg family.
翻訳後修飾	Phosphorylation enhances DNA binding.
細胞内局在	Nucleus.

画像



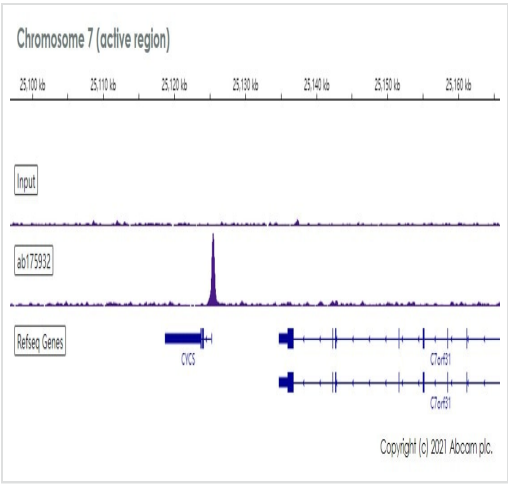
ChIC/CUT&RUN sequencing - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

ChIC/CUT&RUN was performed using a pAG-MNAse at a final concentration of 700 ng/mL, 2 x 10^5 HeLa (Human cervix adenocarcinoma epithelial cell line) cells and 5 µg of ab175932 [EPR5554(N)]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown.

The ChIP data was conducted on chromatin prepared from HeLa cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with 10^7 HeLa cells and 8 µg of ab175932. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads.

Additional screenshots of mapped reads can be downloaded **here**.

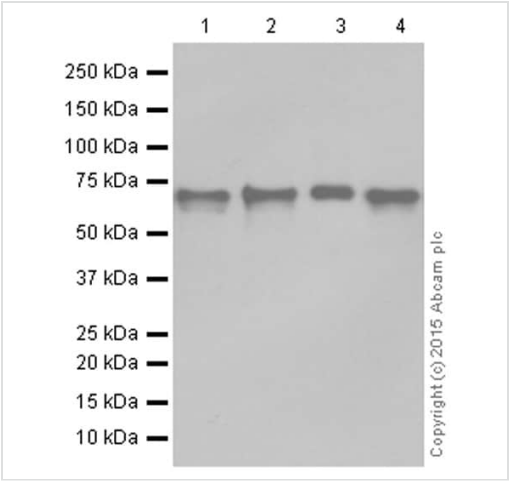
The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



ChIP-sequencing - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Chromatin was prepared from HeLa cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with 10^7 HeLa cells and 8 µg of ab175932 [EPR5554(N)]. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads.

Additional screenshots of mapped reads can be downloaded **here**.



Western blot - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

All lanes : Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932) at 1/5000 dilution (purified)

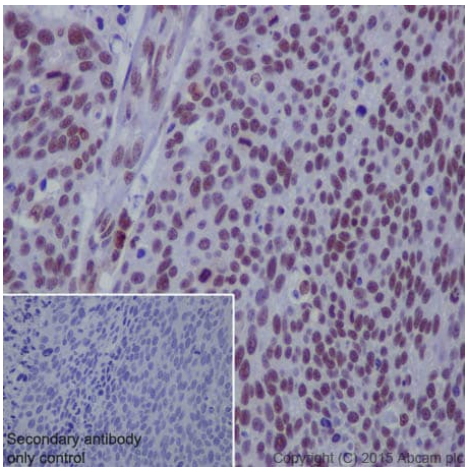
Lane 1 : Mouse heart tissue lysate
Lane 2 : Mouse brain tissue lysate
Lane 3 : Rat heart tissue lysate
Lane 4 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

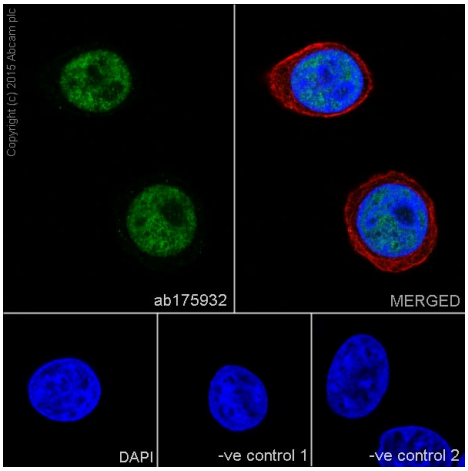
Predicted band size: 54 kDa
Observed band size: 68 kDa

Blocking and dilution buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cevical carcinoma tissue labelling NRF1 with purified ab175932 at a dilution of 1/100. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

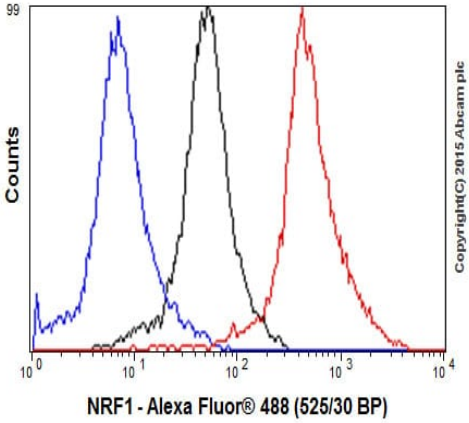


Immunocytochemistry/ Immunofluorescence - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Immunocytochemistry/Immunofluorescence analysis of MCF-7 cells labelling NRF1 with purified ab175932 at a dilution of 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

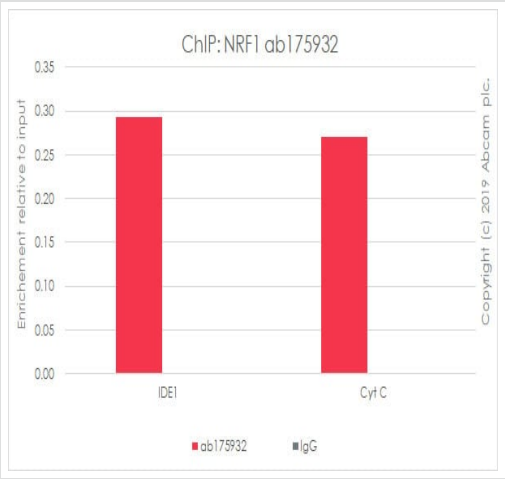
Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).



Flow Cytometry (Intracellular) - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Intracellular Flow Cytometry analysis of 293T cells labelling NRF1 with purified ab175932 at a dilution of 1/150 (red). Cells were fixed with 80% methanol. A FITC-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



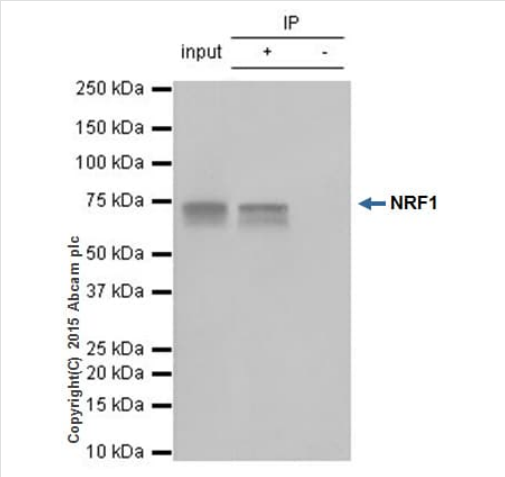
ChIP - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Chromatin was prepared from Hela cells according to the Abcam Dual X-ChIP protocol. Cells were fixed with EGS for 30 minutes, then formaldehyde for 10 minutes.

The ChIP was performed with 25 µg of chromatin, 5 µg of ab175932 (red), and 20 µl of Protein A/G sepharose beads. 5 µg of rabbit normal IgG was added to the beads control (gray). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).

Primers and probes are located in the first kb of the transcribed region.

*http://www.abcam.com/resources?keywords=X%20ChIP%20protocol



Immunoprecipitation - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

ab175932 (purified) at a dilution of 1/50 immunoprecipitating NRF1 in 293T whole cell lysate.

Lane 1 (input): 293T whole cell lysate (10µg)

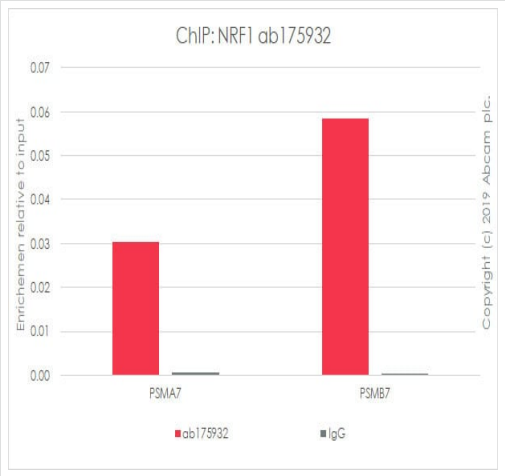
Lane 2 (+): ab175932 + 293T whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab175932 in 293T whole cell lysate.

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10,000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



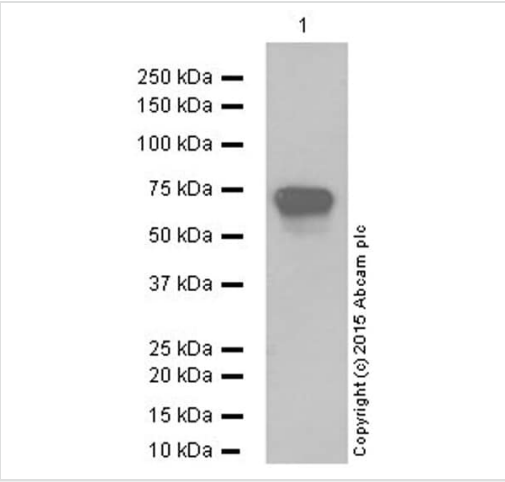
ChIP - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Chromatin was prepared from NIH/3T3 treated with MG-132(2uM 16h) cells according to the Abcam Dual X-ChIP protocol*. Cells were fixed with EGS for 30 minutes, then formaldehyde for 10 minutes.

The ChIP was performed with 25 µg of chromatin, 5 µg of ab175932 (red), and 20 µl of Protein A/G sepharose beads. 5 µg of rabbit normal IgG was added to the beads control (gray). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).

Primers and probes are located in the first kb of the transcribed region.

*http://www.abcam.com/resources?keywords=X%20ChIP%20protocol



Western blot - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932) at 1/10000 dilution (purified) + HEK293 whole cell lysate at 20 µg

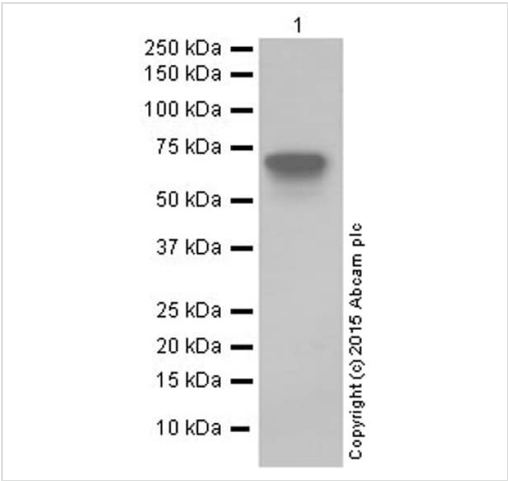
Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 54 kDa

Observed band size: 68 kDa

Blocking and dilution buffer: 5% NFDM/TBST



Western blot - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932) at 1/10000 dilution (purified) + HeLa whole cell lysate at 20 µg

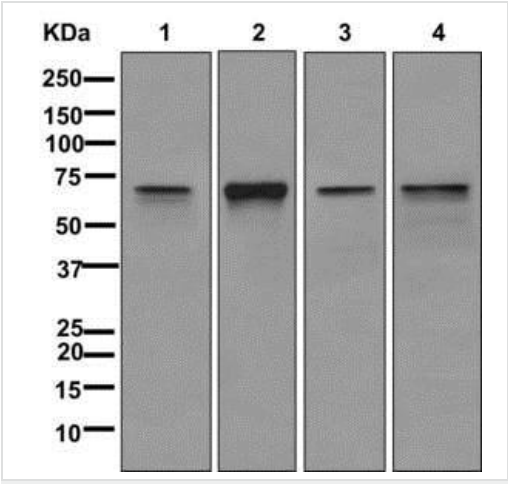
Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 54 kDa

Observed band size: 68 kDa

Blocking and dilution buffer: 5% NFDM/TBST



Western blot - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

All lanes : Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932) at 1/1000 dilution (unpurified)

Lane 1 : MCF-7 cell lysate

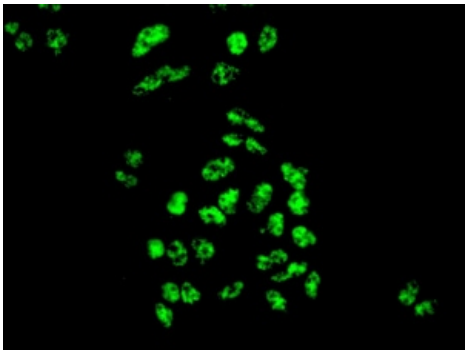
Lane 2 : Hela cell lysate

Lane 3 : Human fetal heart tissue lysate

Lane 4 : 293T cell lysate

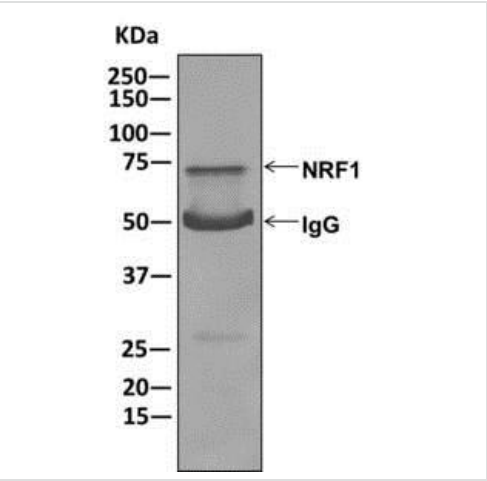
Lysates/proteins at 10 µg per lane.

Predicted band size: 54 kDa



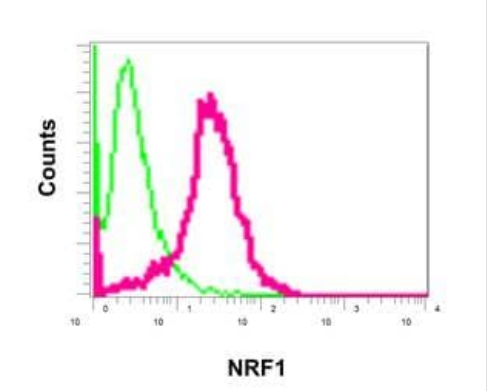
Immunocytochemistry/ Immunofluorescence - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labeling NRF1 with unpurified ab175932 at a dilution of 1/50.



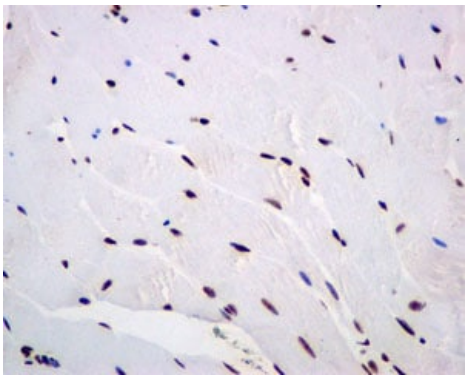
Immunoprecipitation - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

ab175932 (unpurified) at a dilution of 1/10 immunoprecipitating NRF1 in 293T cell lysate.



Flow Cytometry (Intracellular) - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

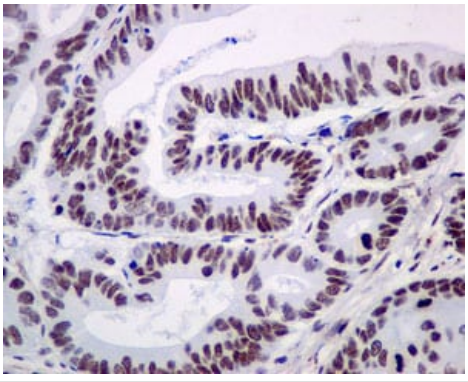
Intracellular flow cytometric analysis of permeabilized 293T cells labeling NRF1 with unpurified ab175932 at a dilution of 1/10 (red) compared to a negative control (rabbit IgG,green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human skeletal muscle tissue labeling NRF1 with unpurified ab175932 at a dilution of 1/50.

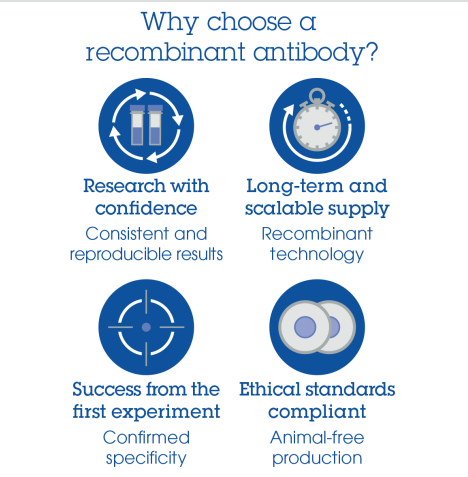
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human gastric adenocarcinoma tissue labeling NRF1 with unpurified ab175932 at a dilution of 1/50.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Anti-NRF1 antibody [EPR5554(N)] - ChIP Grade (ab175932)

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