

Product datasheet

Human TFAP2A (Transcription factor AP-2-alpha) knockout HeLa cell lysate ab257736

3 Images

Overview

Product name	Human TFAP2A (Transcription factor AP-2-alpha) knockout HeLa cell lysate
Product overview	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp insertion in exon 2 and Insertion of the selection cassette in exon 2.
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
Reconstitution notes	To use as WB control, resuspend the lyophilizate in 50 µL of LDS* Sample Buffer to have a final concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M DTT. <i>*Usage of SDS sample buffer is not recommended with these lyophilized lysates.</i>

Notes

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found [here](#). Please refer to our lysis protocol for further details on how our lysates are prepared.

User storage instructions: After reconstitution, store the lysate at -80°C.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines. [See here for more information on knockout cell lysates.](#)

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Tested applications

Suitable for: WB

Properties

Storage instructions Store at -80°C. Please refer to protocols.

Components	1 kit
ab261053 - Human TFAP2A knockout HeLa cell lysate (Lyophilized)	1 x 100µg
ab255929 - Human Wild Type HeLa cell lysate (Lyophilized)	1 x 100µg

Cell type	epithelial
Disease	Adenocarcinoma
Gender	Female
STR Analysis	Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 wWA: 16, 18 TH01: 7 TPOX: 8, 12 CSF1PO: 9, 10

Target

Function	Sequence-specific DNA-binding protein that interacts with inducible viral and cellular enhancer elements to regulate transcription of selected genes. AP-2 factors bind to the consensus sequence 5'-GCCNNNGGC-3' and activate genes involved in a large spectrum of important biological functions including proper eye, face, body wall, limb and neural tube development. They also suppress a number of genes including MCAM/MUC18, C/EBP alpha and MYC. AP-2-alpha is the only AP-2 protein required for early morphogenesis of the lens vesicle.
Involvement in disease	Defects in TFAP2A are the cause of branchiooculofacial syndrome (BOFS) [MIM:113620]; also known as branchial clefts with characteristic facies, growth retardation, imperforate nasolacrimal duct, and premature aging or lip pseudocleft-hemangiomas branchial cyst syndrome. BOFS is a rare autosomal dominant cleft palate craniofacial disorder with variable expressivity. The major features include cutaneous anomalies, ocular anomalies, characteristic facial appearance (malformed pinnae, oral clefts), and, less commonly, renal and ectodermal (dental and hair) anomalies.
Sequence similarities	Belongs to the AP-2 family.
Domain	The WW-binding motif mediates interaction with WWOX.
Post-translational modifications	Sumoylated on Lys-10; which inhibits transcriptional activity.
Cellular localization	Nucleus.

Applications

Our [Abpromise guarantee](#) covers the use of **ab257736** in the following tested applications.

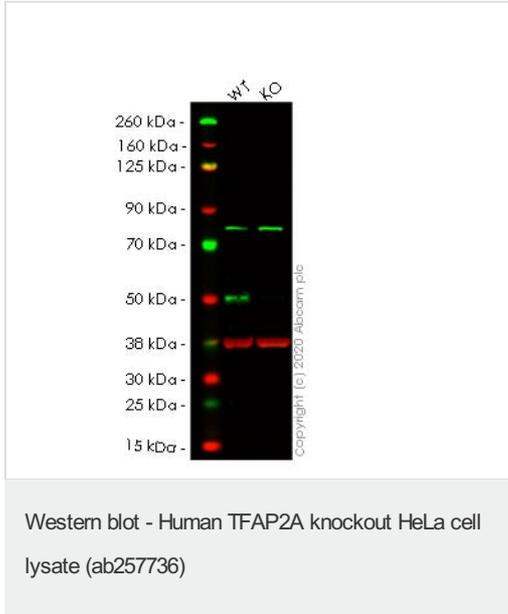
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
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WB Use at an assay dependent concentration. Predicted molecular weight: 48 kDa.

Images

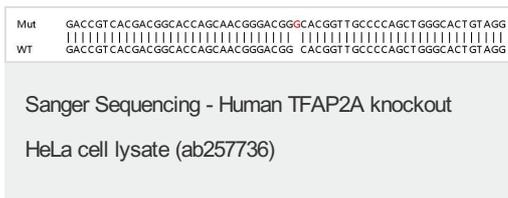


Lane 1: Wild-type HeLa cell lysate (20µg)

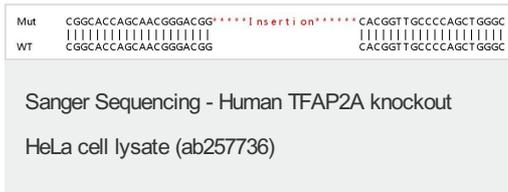
Lane 2: TFAP2A knockout HeLa cell lysate (20µg)

Lanes 1-2: Merged signal (red and green). Green - [ab108311](#) observed at 48 kDa. Red - loading control, [ab8245](#) observed at 37 kDa.

[ab108311](#) Anti-Transcription factor AP-2-alpha antibody [EPR2688(2)] was shown to specifically react with Transcription factor AP-2-alpha in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab265122](#) (knockout cell lysate [ab257736](#)) was used. Wild-type and Transcription factor AP-2-alpha knockout samples were subjected to SDS-PAGE. [ab108311](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 1000 and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Allele-1: 1 bp insertion in exon 2



Allele-2: Insertion of the selection cassette in exon 2

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