abcam

Product datasheet

Anti-Dux4 antibody [E5-5] - BSA and Azide free ab216893



4 Images

Overview

Product name Anti-Dux4 antibody [E5-5] - BSA and Azide free

Description Rabbit monoclonal [E5-5] to Dux4 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: Flow Cyt or ICC/IF

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Human testis tissue lysates, HT-1080, PC-3, Saos-2, HeLa, 293T and A549 whole cell

lysates.

General notes ab216893 is the carrier-free version of ab124699.

For details on the developement of this clone, please refer to **Geng et al. Hybridoma**

(Larchmt). 2011 Apr; 30(2): 125-130.

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number E5-5
Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab216893 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
WB		Use at an assay dependent concentration. Detects a band of approximately 45 kDa (predicted molecular weight: 45 kDa).

Application notes

Is unsuitable for Flow Cyt or ICC/IF.

Target

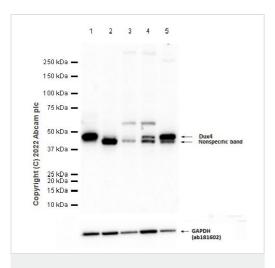
Relevance

DUX4 is a homeodomain protein with a similar protein sequence to Pax3 and Pax7. Defects in DUX4 may be the cause of facioscapulohumeral muscular dystrophy (FSHD). FSHD is characterized by weakness of the muscles of the face, upper-arm and shoulder girdle. Severity is highly variable. Weakness is slowly progressive and about 20% of affected individuals eventually require a wheelchair. Approximately 70-90% of individuals have inherited the disease-causing deletion from a parent, and approximately 10-30% of affected individuals have FSHD as the result of a de novo deletion. Offsprings of an affected individual have a 50% chance of inheriting the deletion.

Cellular localization

Nuclear

Images



Western blot - Anti-Dux4 antibody [E5-5] - BSA and Azide free (ab216893)

All lanes: Anti-Dux4 antibody [E5-5] (ab124699) at 1/1000 dilution

Lane 1: Human testis tissue lysate

Lane 2: HFF-1 (Human Skin fibroblast) whole cell lysate

Lane 3: 293T (Human embryonic kidney epithelial cell) whole cell

lysate

Lane 4: HeLa (Human cervix adenocarcinoma epithelial cell)

whole cell lysate

Lane 5: A549 (Human lung carcinoma epithelial cell) whole cell

lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 45 kDa **Observed band size:** 45 kDa

Exposure time: 60 seconds

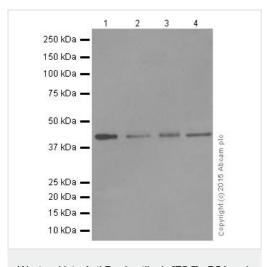
Blocking buffer and concentration: 5% NFDM/TBST **Diluting buffer and concentration**: 5% NFDM/TBST

The expression profile observed in HFF-1 is consistent with the

literature (PMID: 30420784).

Negative control: HFF-1 (PMID: 30420784)

This data was developed using <u>ab124699</u>, the same antibody clone in a different buffer formulation.



Western blot - Anti-Dux4 antibody [E5-5] - BSA and Azide free (ab216893)

All lanes : Anti-Dux4 antibody [E5-5] (<u>ab124699</u>) at 1/1000 dilution (purified)

Lane 1 : HT1080 (human fibrosarcoma cell line) whole cell lysate

Lane 2 : PC-3 (human prostate adenocarcinoma cell line) whole
cell lysate

Lane 3 : Saos-2 (human osteosarcoma cell line) whole cell lysate

Lane 4 : HeLa (human epithelial cell line from cervix

adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

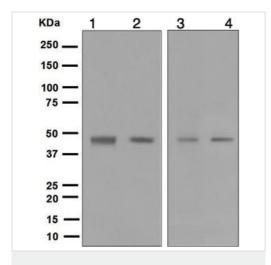
Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 45 kDa **Observed band size:** 45 kDa

This data was developed using <u>ab124699</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Dux4 antibody [E5-5] - BSA and Azide free (ab216893)

All lanes : Anti-Dux4 antibody [E5-5] (<u>ab124699</u>) at 1/1000 dilution (unpurified)

Lane 1: Human testis lysate

Lane 2: HT1080 (human fibrosarcoma cell line) cell lysate

Lane 3: PC-3 (human prostate adenocarcinoma cell line) cell

lysate

Lane 4: HeLa (human epithelial cell line from cervix

adenocarcinoma) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

Predicted band size: 45 kDa

This data was developed using <u>ab124699</u>, the same antibody clone in a different buffer formulation.



Anti-Dux4 antibody [E5-5] - BSA and Azide free (ab216893)

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