

Product datasheet

Anti-TR4 antibody [EPR1773(2)] ab109301

Recombinant RabMAb

[9 References](#) [7 Images](#)

Overview

Product name	Anti-TR4 antibody [EPR1773(2)]
Description	Rabbit monoclonal [EPR1773(2)] to TR4
Host species	Rabbit
Tested applications	Suitable for: WB, IP Unsuitable for: ICC/IF or IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	PC3 cell lysate, 293T cell lysate; Human testis tissue
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1773(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109301 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		1/1000 - 1/10000. Detects a band of approximately 67 kDa (predicted molecular weight: 65 kDa).
IP		1/10 - 1/100.

Application notes Is unsuitable for ICC/IF or IHC-P.

Target

Function Orphan nuclear receptor that can act as a repressor or activator of transcription. An important repressor of nuclear receptor signaling pathways such as retinoic acid receptor, retinoid X, vitamin D3 receptor, thyroid hormone receptor and estrogen receptor pathways. May regulate gene expression during the late phase of spermatogenesis. Together with NR2C1, forms the core of the DRED (direct repeat erythroid-definitive) complex that represses embryonic and fetal globin transcription including that of GATA1. Binds to hormone response elements (HREs) consisting of two 5'-AGGTCA-3' half site direct repeat consensus sequences. Plays a fundamental role in early embryonic development and embryonic stem cells. Required for normal spermatogenesis and cerebellum development. Appears to be important for neurodevelopmentally regulated behavior (By similarity). Activates transcriptional activity of LHCG. Antagonist of PPARA-mediated transactivation.

Sequence similarities Belongs to the nuclear hormone receptor family. NR2 subfamily. Contains 1 nuclear receptor DNA-binding domain.

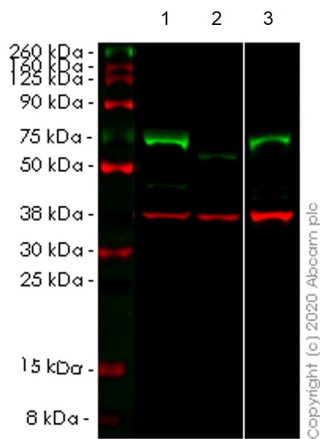
Developmental stage Transiently repressed during the meiotic phase of spermatogenesis.

Post-translational modifications Phosphorylation on Ser-19 and Ser-68 is an important regulator of NR2C2-mediated transcriptional activity. Phosphorylation on these residues recruits the corepressor, NRIP1, leading to transcriptional repression, whereas the nonphosphorylated form preferentially recruits the coactivator, PCAF.

Cellular localization Nucleus.

Form There are 2 isoforms produced by alternative splicing.

Images



Western blot - Anti-TR4 antibody [EPR1773(2)]
(ab109301)

All lanes : Anti-TR4 antibody [EPR1773(2)] (ab109301) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate

Lane 2 : NR2C2 CRISPR/Cas9 edited HEK293T cell lysate

Lane 3 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

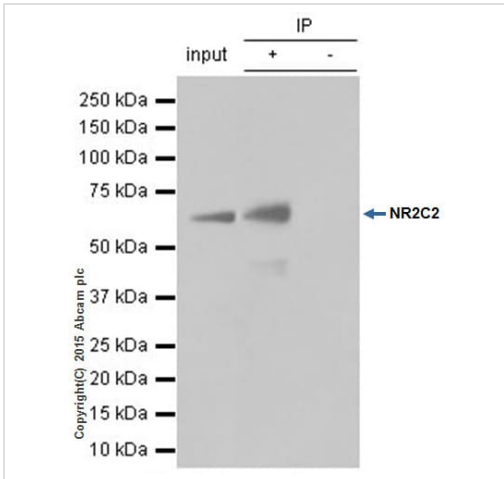
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 65 kDa

Observed band size: 67 kDa

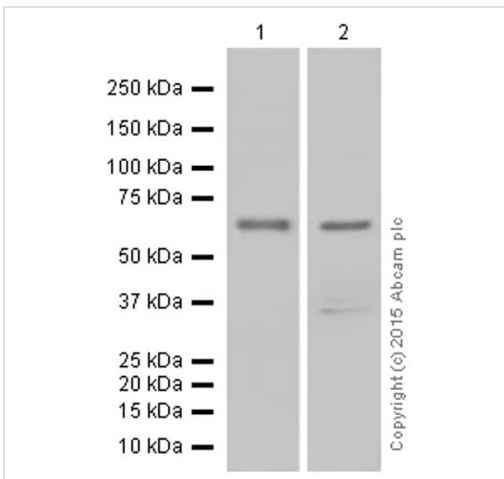
Lanes 1-3: Merged signal (red and green). Green - ab109301 observed at 67 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab109301 Anti-TR4 antibody [EPR1773(2)] was shown to specifically react with TR4 in wild-type HEK293T cells. The band observed in CRISPR/Cas9 edited cell line **ab266228** (CRISPR/Cas9 edited cell lysate **ab257563**) lane below 67 kDa may represent truncated forms and cleaved fragments. This has not been investigated further. Wild-type and TR4 CRISPR/Cas9 edited samples were subjected to SDS-PAGE. ab109301 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated at room temperature for 2.5 hours at 1 in 1000 dilution 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.



Immunoprecipitation - Anti-TR4 antibody
[EPR1773(2)] (ab109301)

ab109301 (purified) at 1/30 immunoprecipitating TR4 in 10 µg HEK293 cell lysate (Lanes 1 and 2, observed at 67 kDa). Lane 3 - Rabbit monoclonal IgG (**ab172730**). 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 Dilution buffer and concentration: 5% NFDm/TBST



Western blot - Anti-TR4 antibody [EPR1773(2)]
(ab109301)

All lanes : Anti-TR4 antibody [EPR1773(2)] (ab109301) at 1/5000 dilution (purified)

Lane 1 : PC-12 whole cell lysate

Lane 2 : 3T3-L1 whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

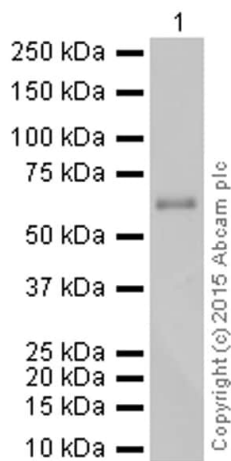
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 65 kDa

Observed band size: 67 kDa

Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



Western blot - Anti-TR4 antibody [EPR1773(2)]
(ab109301)

Anti-TR4 antibody [EPR1773(2)] (ab109301) at 1/5000 dilution
(purified) + HEK-293 whole cell lysate at 20 µg

Secondary

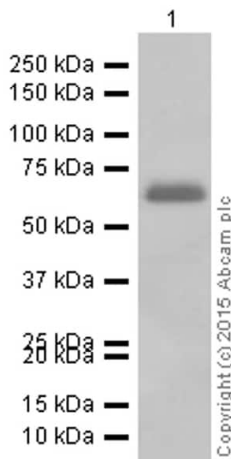
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 65 kDa

Observed band size: 67 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-TR4 antibody [EPR1773(2)]
(ab109301)

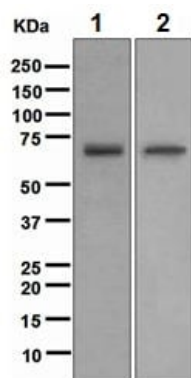
Anti-TR4 antibody [EPR1773(2)] (ab109301) at 1/2000 dilution
(purified) + PC-3 whole cell lysate at 10 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 65 kDa

Observed band size: 67 kDa



Western blot - Anti-TR4 antibody [EPR1773(2)] (ab109301)

All lanes : Anti-TR4 antibody [EPR1773(2)] (ab109301) at 1/1000 dilution (Unpurified)

Lane 1 : PC3 cell lysate

Lane 2 : 293T cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 65 kDa

Observed band size: 67 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-TR4 antibody [EPR1773(2)] (ab109301)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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