


Product datasheet

Anti-5T4 antibody [EPR5530] ab129058

KO VALIDATED Recombinant RabMAB

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Overview

Product name	Anti-5T4 antibody [EPR5530]
Description	Rabbit monoclonal [EPR5530] to 5T4
Host species	Rabbit
Tested applications	Suitable for: WB, IP Unsuitable for: Flow Cyt, ICC/IF or IHC-P
Species reactivity	Reacts with: Rat, Human Predicted to work with: Mouse 
Immunogen	Synthetic peptide within Human 5T4 aa 350-450 (intracellular). The exact sequence is proprietary.
Positive control	HEK-293T, HT 1376, HeLa, JAR and MCF7 cell lysates; MCF7 cells.
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> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5530
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab129058 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 72-80 kDa (predicted molecular weight: 46 kDa).
IP		1/80.

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

Target

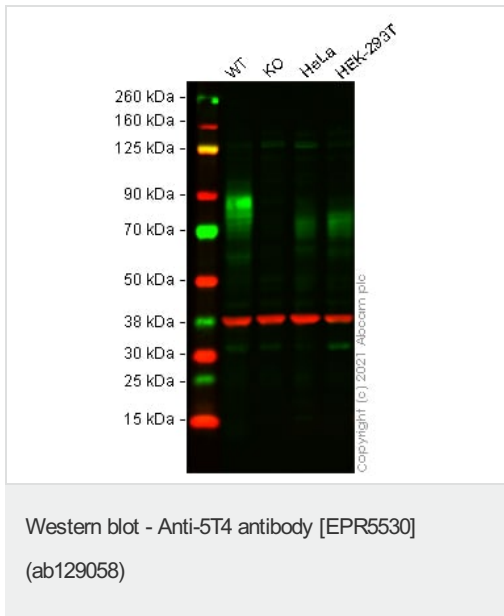
Tissue specificity Expressed by all types of trophoblasts as early as 9 weeks of development. Specific for trophoblastic cells except for amniotic epithelium. In adult tissues, the expression is limited to a few epithelial cell types but is found on a variety of carcinoma.

Sequence similarities Contains 6 LRR (leucine-rich) repeats.
Contains 1 LRRCT domain.
Contains 1 LRRNT domain.

Cellular localization Membrane.

Form 5T4 is a 72 kDa transmembrane glycoprotein that exhibits restricted expression in human and mouse adult tissues, is upregulated on many carcinomas and tumour expression correlates with poorer clinical outcome in ovarian, gastric and colorectal cancers. mES cells lack cell surface expression of the 5T4 antigen, and both protein and mRNA are rapidly upregulated following induction of differentiation. This proteins expression correlates with downregulation of OCT-4 and Tra-1-60 (Ward et al., 2006).

Images



All lanes : Anti-5T4 antibody [EPR5530] (ab129058) at 1/1000 dilution

Lane 1 : Wild-type MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lane 2 : TPBG knockout MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 4 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lysates/proteins at 20 µg per lane.

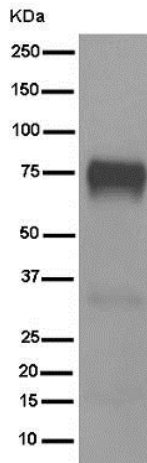
Performed under reducing conditions.

Predicted band size: 46 kDa

Observed band size: 85 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab129058 observed at 85 kDa. Red - loading control [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab129058 was shown to react with 5T4 in wild-type MCF7 cells in Western blot with loss of signal observed in TPBG knockout cell line [ab269499](#) (knockout cell lysate [ab269661](#)). Wild-type MCF7 and TPBG knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in before incubation with ab129058 and [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-5T4 antibody [EPR5530]
(ab129058)

Anti-5T4 antibody [EPR5530] (ab129058) at 1/5000 dilution
(purified) + Rat brain at 20 µg

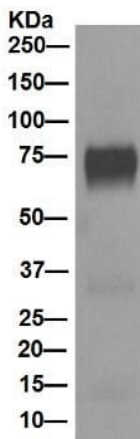
Secondary

HRP goat-anti rabbit (H+L) at 1/1000 dilution

Predicted band size: 46 kDa

Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



Western blot - Anti-5T4 antibody [EPR5530]
(ab129058)

Anti-5T4 antibody [EPR5530] (ab129058) at 1/2000 dilution
(unpurified) + Rat brain at 20 µg

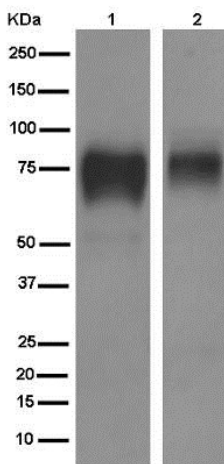
Secondary

HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 46 kDa

Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



Western blot - Anti-5T4 antibody [EPR5530]
(ab129058)

All lanes : Anti-5T4 antibody [EPR5530] (ab129058) at 1/5000 dilution (purified)

Lane 1 : HT-1376 cell lysate

Lane 2 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

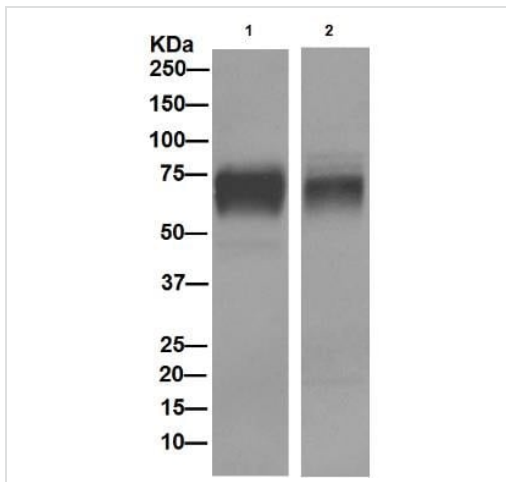
Secondary

All lanes : HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 46 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-5T4 antibody [EPR5530]
(ab129058)

All lanes : Anti-5T4 antibody [EPR5530] (ab129058) at 1/2000 dilution (unpurified)

Lane 1 : HT-1376 cell lysate

Lane 2 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

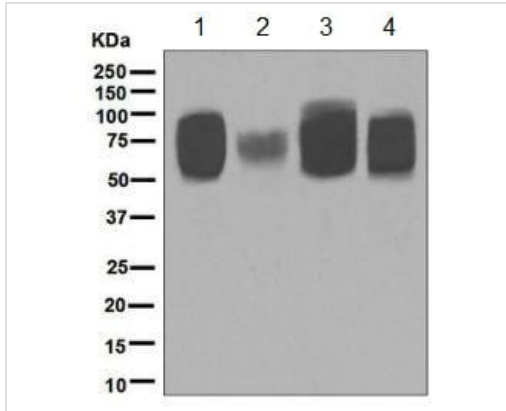
Secondary

All lanes : HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 46 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-5T4 antibody [EPR5530]
(ab129058)

All lanes : Anti-5T4 antibody [EPR5530] (ab129058) at 1/1000 dilution (unpurified)

Lane 1 : HT 1376 cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : JAR cell lysate

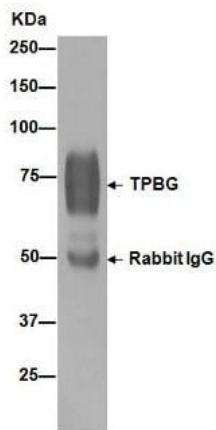
Lane 4 : MCF7 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 46 kDa

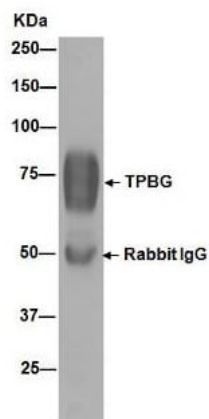


Immunoprecipitation - Anti-5T4 antibody [EPR5530]
(ab129058)

ab129058 (unpurified) at 1/50 immunoprecipitating 5T4 in MCF-7 (Lane 1). For western blotting, a HRP goat anti-rabbit was used as the secondary antibody (1/1000).

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.



Immunoprecipitation - Anti-5T4 antibody [EPR5530]
(ab129058)

ab129058 (unpurified) at 1/50 immunoprecipitating 5T4 in MCF-7 (Lane 1). For western blotting, a HRP goat anti-rabbit was used as the secondary antibody (1/1000).

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.

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-5T4 antibody [EPR5530] (ab129058)

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

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