abcam

Product datasheet

Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] - BSA and Azide free ab242440

Recombinant

RabMAb

6 Images

Overview

Product name Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] - BSA and Azide free

Description Rabbit monoclonal [UMB-8-37-1] to Endothelin A Receptor/ET-A - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IHC-P, WB

Species reactivity Reacts with: Mouse, Rat, Human

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

Positive control WB: Mouse heart and lung tissue lysates; IHC-P: Mouse and rat cardiac muscle and human

placenta tissue.

General notes ab242440 is the carrier-free version of ab178454.

This product has switched from a hybridoma to recombinant production method on 9th September

2020.

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**.

Our <u>carrier-free</u> 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 cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> 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

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- 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 UMB-8-37-1

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab242440 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 40-70 kDa (predicted molecular weight: 49 kDa).

Target

Function Receptor for endothelin-1. Mediates its action by association with G proteins that activate a

phosphatidylinositol-calcium second messenger system. The rank order of binding affinities for

ET-A is: ET1 > ET2 >> ET3.

Tissue specificity Isoform 1, isoform 3 and isoform 4 are expressed in a variety of tissues, with highest levels in the

aorta and cerebellum, followed by lung, atrium and cerebral cortex, lower levels in the placenta, kidney, adrenal gland, duodenum, colon, ventricle and liver but no expression in umbilical vein endothelial cells. Within the placenta, isoform 1, isoform 2, isoform 3 and isoform 4 are expressed

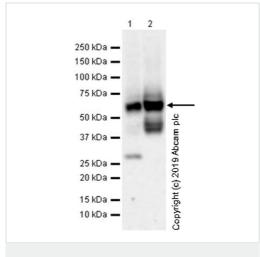
in the villi and stem villi vessels.

Sequence similarities Belongs to the G-protein coupled receptor 1 family. Endothelin receptor subfamily. EDNRA sub-

subfamily.

Cellular localization Cell membrane.

Images



Western blot - Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] - BSA and Azide free (ab2424440)

All lanes : Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] (ab178454) at 1/1000 dilution

Lane 1 : Mouse heart lysate

Lane 2 : Mouse lung lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Developed using the ECL technique.

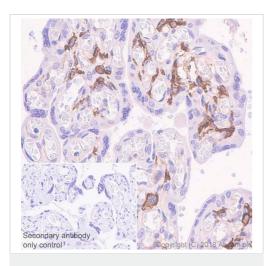
Performed under reducing conditions.

Predicted band size: 49 kDa **Observed band size:** 40-70 kDa

Exposure time: 26 seconds

This data was developed using the same antibody clone in a different buffer formulation (ab178454).

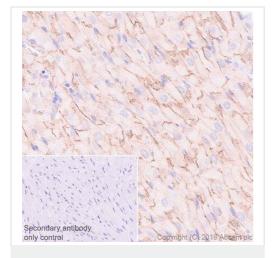
Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Endothelin A
Receptor/ET-A antibody [UMB-8-37-1] - BSA and
Azide free (ab2424440)

This data was developed using the same antibody clone in a different buffer formulation (<u>ab178454</u>).

Immunohistochemical analysis of paraffin-embedded human placenta tissue labeling Endothelin A Receptor/ET-A with ab178454 at 1/100 dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on stroma cells of human ovarian carcinoma is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval using ab208572 (Universal HIER antigen retrieval reagent).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Endothelin A
Receptor/ET-A antibody [UMB-8-37-1] - BSA and
Azide free (ab2424440)

This data was developed using the same antibody clone in a different buffer formulation (**ab178454**).

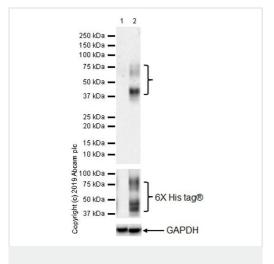
Immunohistochemical analysis of paraffin-embedded rat cardiac muscle tissue labeling Endothelin A Receptor/ET-A with ab178454 at 1/100 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on rat cardiac muscle is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Endothelin A
Receptor/ET-A antibody [UMB-8-37-1] - BSA and
Azide free (ab2424440)

This data was developed using the same antibody clone in a different buffer formulation (ab178454).

Immunohistochemical analysis of paraffin-embedded mouse cardiac muscle tissue labeling Endothelin A Receptor/ET-A with ab178454 at 1/100 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on mouse cardiac muscle is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



Western blot - Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] - BSA and Azide free (ab242440)

All lanes : Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] (ab178454) at 1/1000 dilution

Lane 1 : HEK-293 (human embryonic kidney) transfected with an empty vector (vector control), containing a myc-His-tag®, whole cell lysate

Lane 2 : HEK-293 transfected with Endothelin A Receptor/ET-A (WT) expression vector containing a myc-His-tag® , whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

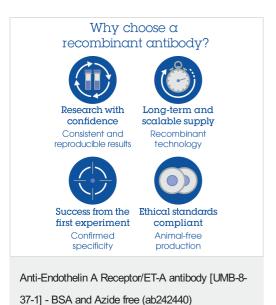
Predicted band size: 49 kDa **Observed band size:** 40-80 kDa

Exposure time: 3 minutes

This data was developed using the same antibody clone in a

different buffer formulation (ab178454).

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



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

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