

## Product datasheet

# Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] ab178454

Recombinant RabMAb

★★★★★ 1 Abreviews 9 References 7 Images

### Overview

<b>Product name</b>	Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1]
<b>Description</b>	Rabbit monoclonal [UMB-8-37-1] to Endothelin A Receptor/ET-A
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Mouse heart and lung tissue lysates; IHC-P: Mouse and rat cardiac muscle and human placenta tissue.
<b>General notes</b>	<p>This product has switched from a hybridoma to recombinant production method on 9<sup>th</sup> September 2020.</p> <p>The epitope recognized by the UMB-8-37-1 monoclonal contains phosphorylation sites that affect signal in Western blot after treatment with endothelin. Phosphatase treatment may be required prior to Western blot in order to improve signal (PubMed ID 25708416).</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40

Preservative: 0.01% Sodium azide  
Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Some batches contain 6.97% L-Arginine as a stabilizing agent. For lot-specific buffer information, please contact our Scientific Support team.

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	UMB-8-37-1
<b>Isotype</b>	IgG

## Applications

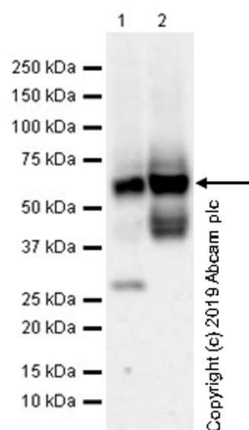
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab178454 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 40-70 kDa.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	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.
<b>Sequence similarities</b>	Belongs to the G-protein coupled receptor 1 family. Endothelin receptor subfamily. EDNRA sub-subfamily.
<b>Cellular localization</b>	Cell membrane.

## Images



Western blot - Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] (ab178454)

**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 IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

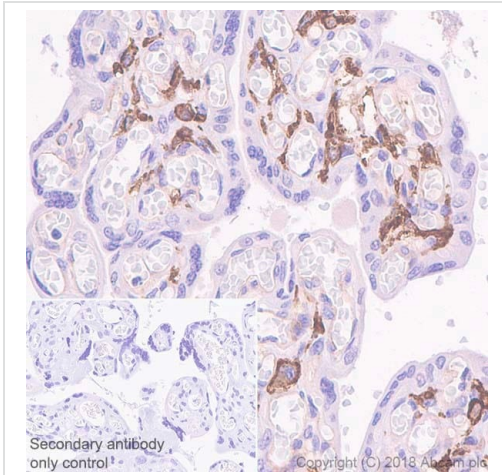
**Predicted band size:** 40-70 kDa

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

**Exposure time:** 26 seconds

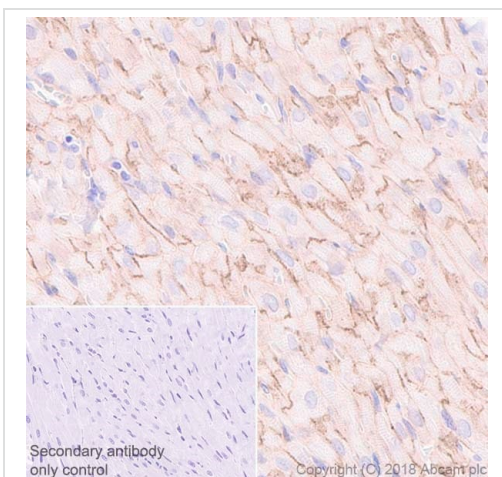
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The observed molecular weight is consistent with what has been described in the literature (PMID: 25708416).



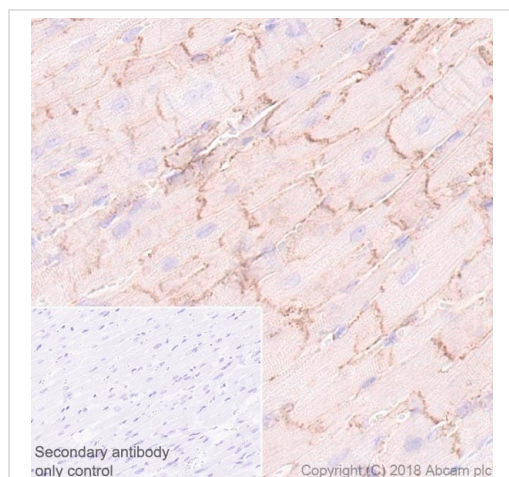
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] (ab178454)

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 Goat Anti-Rabbit IgG H&L (HRP). 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 Tris/EDTA buffer (pH 9.0).

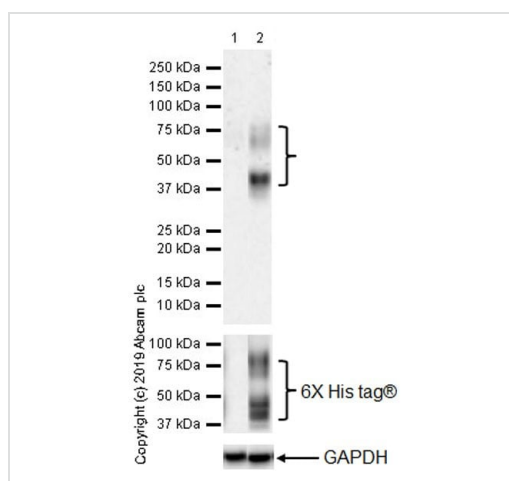


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] (ab178454)

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). 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 Tris/EDTA buffer (pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] (ab178454)



Western blot - Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] (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). 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 Tris/EDTA buffer (pH 9.0).

**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 IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Developed using the ECL technique.

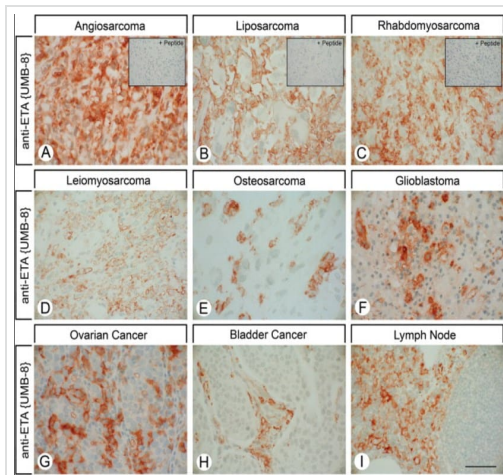
Performed under reducing conditions.

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

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

**Exposure time:** 3 minutes

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Endothelin A

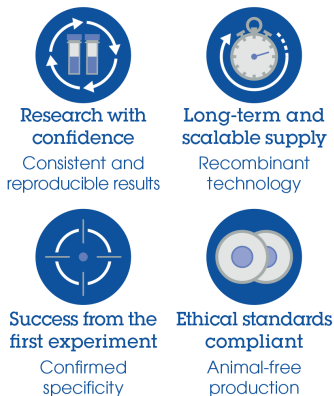
Receptor/ET-A antibody [UMB-8-37-1] (ab178454)

Lupp A et al., Peptides, 66, 19-25, Fig 3.; doi: 10.1016/j.peptides.2015.02.005. With permission from Elsevier

Immunohistochemical localization of ETA in human normal lymph node (I) and in neoplastic tissues (A–H) using ab178454. For more protocol information please see PMID: 25708416.

Image generated from hybridoma version of ab178454

Why choose a recombinant antibody?



Anti-Endothelin A Receptor/ET-A antibody [UMB-8-37-1] (ab178454)

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

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