# Anti-beta 3 Adrenergic Receptor antibody ab94506

### Overview

**Product name**
Anti-beta 3 Adrenergic Receptor antibody

**Description**
Rabbit polyclonal to beta 3 Adrenergic Receptor

**Host species**
Rabbit

**Tested applications**
Suitable for: WB, IHC-P

**Species reactivity**
Reacts with: Mouse

**Immunogen**
Synthetic peptide corresponding to Mouse beta 3 Adrenergic Receptor aa 350 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as ab108460)

**Positive control**
WB: Mouse brown adipose tissue lysate. IHC-P: Mouse pancreas tissue. Mouse Adipose, Mouse Bladder, Mouse ovary.

### 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 or -80°C. Avoid freeze / thaw cycle.

**Storage buffer**
- pH: 7.40
- Preservative: 0.02% Sodium azide
- Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

**Purity**
Immunogen affinity purified

**Clonality**
Polyclonal

**Isotype**
IgG

### Applications

Our Abpromise guarantee covers the use of ab94506 in the following tested applications.
Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylate cyclase through the action of G proteins. Beta-3 is involved in the regulation of lipolysis and thermogenesis.

**Tissue specificity**
Expressed mainly in adipose tissues.

**Sequence similarities**
Belongs to the G-protein coupled receptor 1 family. Adrenergic receptor subfamily. ADRB3 sub-subfamily.

**Cellular localization**
Cell membrane.

### Application Notes

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<th>Application</th>
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<th>Notes</th>
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<tbody>
<tr>
<td>WB</td>
<td></td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 44 kDa (predicted molecular weight: 43 kDa).</td>
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<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 1 - 10 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
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### Target

**Function**
Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylate cyclase through the action of G proteins. Beta-3 is involved in the regulation of lipolysis and thermogenesis.

**Tissue specificity**
Expressed mainly in adipose tissues.

**Sequence similarities**
Belongs to the G-protein coupled receptor 1 family. Adrenergic receptor subfamily. ADRB3 sub-subfamily.

**Cellular localization**
Cell membrane.

### Images

**Western blot** - Anti-beta 3 Adrenergic Receptor antibody (ab94506)

- **All lanes**: Anti-beta 3 Adrenergic Receptor antibody (ab94506) at 1 µg/ml
- **Lane 1**: Brown Adipose (Mouse) Tissue Lysate
- **Lane 2**: Brown Adipose (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

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

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size**: 43 kDa

**Observed band size**: 44 kDa

why is the actual band size different from the predicted?

**Exposure time**: 8 minutes
This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab94506 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

IHC image of beta 3 Adrenergic Receptor staining in Mouse adipose (white) tissue formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab94506, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

IHC image of beta 3 Adrenergic Receptor staining in Mouse Ovary Normal tissue formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab94506, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta 3 Adrenergic Receptor antibody (ab94506)

IHC image of beta 3 Adrenergic Receptor staining in Mouse Bladder Normal tissue formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab94506, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Western blot - Anti-beta 3 Adrenergic Receptor antibody (ab94506)

Anti-beta 3 Adrenergic Receptor antibody (ab94506) at 1 µg/ml + Brown Adipose (Mouse) Tissue Lysate at 20 µg

Secondary
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 43 kDa

Observed band size: 44 kDa why is the actual band size different from the predicted?

Additional bands at: 22 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 2 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab94506 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development.
solution.

**All lanes**: Anti-beta 3 Adrenergic Receptor antibody (ab94506) at 1 µg/ml

**Lane 1**: Mouse ovary tissue lysate  
**Lane 2**: Mouse bladder tissue lysate

Lysates/proteins at 25 µg per lane.

**Secondary**

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

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size**: 43 kDa

**Exposure time**: 20 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab94506 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta 3 Adrenergic Receptor antibody (ab94506)

IHC image of beta 3 Adrenergic Receptor staining in Mouse pancreas formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab94506, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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