# Anti-CD40 antibody ab13545

**Product name:** Anti-CD40 antibody  
**Description:** Rabbit polyclonal to CD40  
**Host species:** Rabbit  
**Specificity:** The antibody specificity is confirmed by specific peptide inhibition in immunoblotting studies.  
**Tested applications:** Suitable for: IHC-P, WB  
**Species reactivity:** Reacts with: Mouse, Rat, Sheep, Rabbit, Guinea pig, Hamster, Cow, Human, Pig, Monkey  
**Predicted to work with:** Chicken, Dog  
**Immunogen:** Synthetic peptide: CQPVTQEDGKESRISVQERQ conjugated to KLH, corresponding to amino acids 258-277 of Human CD40.  
**Positive control:** HeLa Cell Lysate. This antibody gave a positive result in IHC in the following FFPE tissue: Human normal tonsil.  
**General notes:** Storage below -20°C is not recommended. For maximum product recovery centrifuge the product vial before removing cap. Shipped on gel packs.

## Properties

<table>
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<th>Property</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.</td>
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</table>
| **Storage buffer**        | Preservative: 0.09% Sodium azide  
Constituents: PBS, 50% Glycerol |
| **Purity**                | Affinity purified                                |
| **Purification notes**    | Peptide affinity purified.                       |
| **Clonality**             | Polyclonal                                       |
| **Isotype**               | IgG                                              |

## Applications
Our **Abpromise guarantee** covers the use of **ab13545** in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
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<tr>
<td>IHC-P</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
</tr>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/1000. Detects a band of approximately 40 kDa (predicted molecular weight: 34 kDa).</td>
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**Target**

**Function**

Receptor for TNFSF5/CD40LG.

**Tissue specificity**

B-cells and in primary carcinomas.

**Involvement in disease**

Defects in CD40 are the cause of hyper-IgM immunodeficiency syndrome type 3 (HIGM3) [MIM:606843]; also known as hyper-IgM syndrome 3. HIGM3 is an autosomal recessive disorder which includes an inability of B cells to undergo isotype switching, one of the final differentiation steps in the humoral immune system, an inability to mount an antibody-specific immune response, and a lack of germinal center formation.

**Sequence similarities**

Contains 4 TNFR-Cys repeats.

**Cellular localization**

Secreted and Cell membrane.

**Images**

**All lanes**: Anti-CD40 antibody (ab13545) at 1/200 dilution

**Lane 1**: ESK4 cell lysate

**Lane 2**: Molt 4 cell lysate

**Predicted band size**: 34 kDa

Western blot - Anti-CD40 antibody (ab13545)
Western blot - Anti-CD40 antibody (ab13545)

This image is courtesy of an anonymous Abreview

All lanes: Anti-CD40 antibody (ab13545) at 1/5000 dilution

Lane 1: Human B chronic lymphocytic leukaemia cells, nuclear fraction

Lane 2: Human B chronic lymphocytic leukaemia cells, cytoskeletal fraction

Lane 3: Human B chronic lymphocytic leukaemia cells, membrane fraction

Lane 4: Human B chronic lymphocytic leukaemia cells, cytosolic fraction

Lysates/proteins at 18 µg per lane.

Secondary

All lanes: HRP conjugated goat anti-rabbit

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 34 kDa

Observed band size: 42 kDa

why is the actual band size different from the predicted?

Exposure time: 3 minutes

The primary antibody was incubated with the membrane for 16 hours at 4°C.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD40 antibody (ab13545)

IHC image of CD40 staining in Human normal tonsil 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 ab13545, 1µg/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
Anti-CD40 antibody (ab13545) at 1/1000 dilution + Recombinant human CD40 protein (Fc Chimera Active) (ab83917) at 1 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 34 kDa

**Exposure time:** 8 minutes

**All lanes:** Anti-CD40 antibody (ab13545) at 1/1000 dilution

**Lanes 1-2:** Control human HCAEC cells - whole cell lysate

**Lanes 3-4:** Treated human HCAEC cells - whole cell lysate

**Secondary**
**All lanes:** HRP conjugated Goat Anti-Rabbit IgG

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 34 kDa

**Observed band size:** 45 kDa

*why is the actual band size different from the predicted?*

**Exposure time:** 20 seconds

This image is courtesy of an Abreview submitted on 10 August 2005.
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