Product datasheet

Anti-TNF alpha antibody ab9739

Overview

Product name  Anti-TNF alpha antibody
Description  Rabbit polyclonal to TNF alpha
Host species  Rabbit
Tested applications  Suitable for: WB, Neutralising, Sandwich ELISA
Species reactivity  Reacts with: Mouse
Immunogen  Recombinant fragment corresponding to Mouse TNF alpha aa 80-235. E.coli-derived recombinant MurineTNF-alpha
Database link: P06804
Positive control  Recombinant mouse TNF alpha protein (ab9740) can be used as a positive control in WB.

Properties

Form  Lyophilised:Reconstitute with 200µl of sterile water. Please note that if you receive this product in liquid form it has already been reconstituted as described and no further reconstitution is necessary.
Storage buffer  pH: 7.40
No preservative, sterile filtered
Purity  Immunogen affinity purified
Clonality  Polyclonal
Isotype  unknown
Light chain type  unknown

Applications

Our Abpromise guarantee covers the use of ab9739 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>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration. To detect TNF alpha by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant TNF alpha is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions. The precursor is ~26 kDa and the secreted form is ~17 kDa.</td>
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<tr>
<td>Neutralising</td>
<td></td>
<td>Use at an assay dependent concentration. To yield one-half maximal inhibition [ND₅₀] of the biological activity of mTNF-alpha (0.25 ng/ml), a concentration of 0.08 – 0.10 µg/ml of this antibody is required.</td>
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<tr>
<td>Sandwich ELISA</td>
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<td>Use at an assay dependent concentration. To detect Murine TNF alpha by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of ab9739 is required. This antigen affinity purified antibody, in conjunction with a suitable detection antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant Murine TNF alpha.</td>
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**Target**

**Function**
Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia. Under certain conditions it can stimulate cell proliferation and induce cell differentiation.

**Involvement in disease**
Genetic variations in TNF are a cause of susceptibility psoriatic arthritis (PSORAS) [MIM:607507]. PSORAS is an inflammatory, seronegative arthritis associated with psoriasis. It is a heterogeneous disorder ranging from a mild, non-destructive disease to a severe, progressive, erosive arthropathy. Five types of psoriatic arthritis have been defined: asymmetrical oligoarthritis characterized by primary involvement of the small joints of the fingers or toes; asymmetrical arthritis which involves the joints of the extremities; symmetrical polyarthritis characterized by a rheumatoid-like pattern that can involve hands, wrists, ankles, and feet; arthritis mutilans, which is a rare but deforming and destructive condition; arthritis of the sacroiliac joints and spine (psoriatic spondylitis).

**Sequence similarities**
Belongs to the tumor necrosis factor family.

**Post-translational modifications**
The soluble form derives from the membrane form by proteolytic processing.
The membrane form, but not the soluble form, is phosphorylated on serine residues.
Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1.
O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid.

**Cellular localization**
Secreted and Cell membrane.

| Images |
ELISA analysis of ab9739. This antigen affinity purified antibody, in conjunction with a suitable detection antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant Murine TNF alpha.

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