

# Recombinant human TNF alpha protein (Active) ab155699

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### 描述

<b>产品名称</b>	重组人TNF alpha蛋白(Active)
<b>生物活性</b>	Bioactivity is measured by its binding ability in a functional ELISA. Immobilized ab155699 at 2 µg/mL ( 100 µl/well ) can bind Humira with a linear range of 0.2-2 ng/mL.
<b>纯度</b>	> 95 % SDS-PAGE. >95% SEC-MALS. Purified by ion exchange chromatography.
<b>内毒素水平</b>	< 0.100 Eu/µg
<b>表达系统</b>	HEK 293 cells
<b>Accession</b>	<b><u>P01375</u></b>
<b>蛋白长度</b>	Full length protein
<b>无动物成分</b>	No
<b>性质</b>	Recombinant
<b>种属</b>	Human
<b>序列</b>	VRSSSRTPSDKPVAHVVANPQAEGLQWLNRRANALLANGVE LRDNQLVV PSEGLYLIYSQVLFKGGQCPSTHVLLTHTISRIAVSYQTKVN LLSAIKSP CQRETPEGAEAKPWYEPIYLGGVFQLEKGDRLSAEINRPDYL DFAESGQV YFGIIAL
<b>预测分子量</b>	17 kDa
<b>氨基酸</b>	77 to 233

### 技术指标

Our **Abpromise guarantee** covers the use of **ab155699** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>应用</b>	Functional Studies SDS-PAGE ELISA
<b>形式</b>	Lyophilized

**补充说明**

Endotoxin levels determined by the LAL method.

**制备和贮存**

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**稳定性和存储**

Shipped at 4°C. Store at 4°C (stable for up to 12 months). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. For long term storage it is recommended to add a carrier protein on reconstitution (0.1% HSA or BSA).

pH: 7.40

Constituents: PBS, 5% Trehalose

Lyophilized from 0.22 µm filtered solution.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

**复溶**

Reconstitute with sterile deionized water to a concentration of 200 µg/ml.

**常规信息**

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**功能**

Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. 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.

**疾病相关**

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 rheumatoidlike 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).

**序列相似性**

Belongs to the tumor necrosis factor family.

**翻译后修饰**

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.

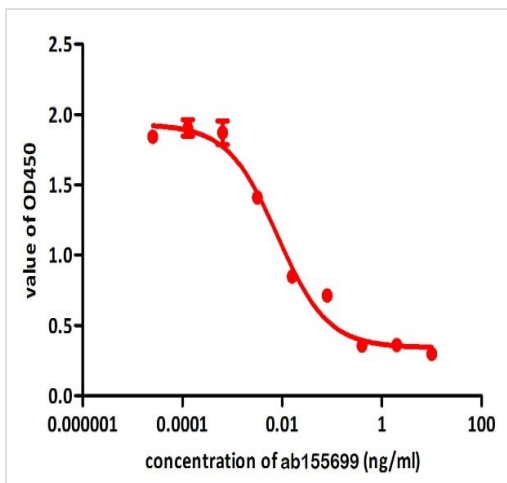
**细胞定位**

Secreted and Cell membrane.

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**图片**

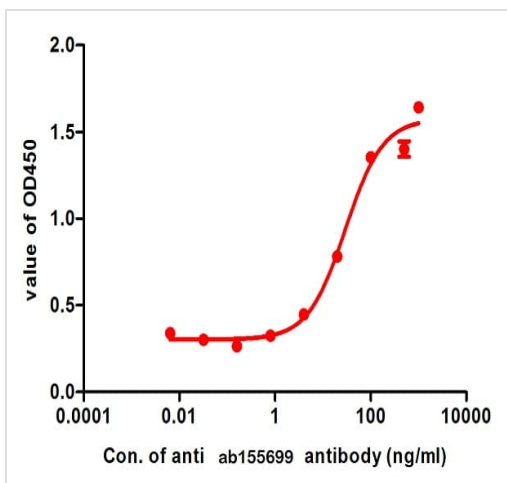
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ab155699 induces cytotoxicity effect on the WEH1-13VAR cells in the presence of the metabolic inhibitor actinomycin D.

The EC<sub>50</sub> for this effect is 0.007-0.014 ng/ml (Routinely tested).

Functional Studies - Recombinant human TNF alpha protein (ab155699)

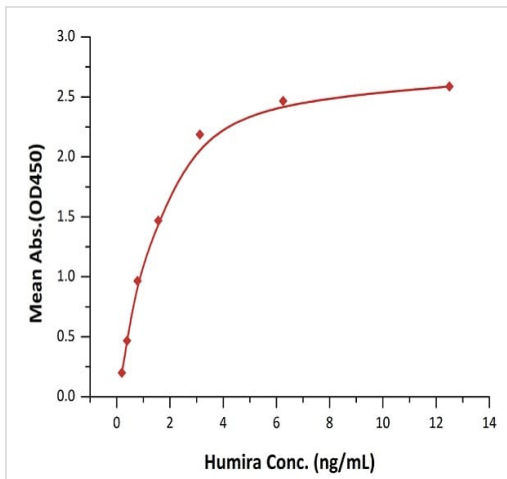


Neutralization assay shows that the cytotoxicity effect of ab155699 was inhibited by increasing concentration of Adalimumab.

The concentration of ab155699 used is 1 ng/mL.

The IC<sub>50</sub> is 29 ng/mL (Routinely tested).

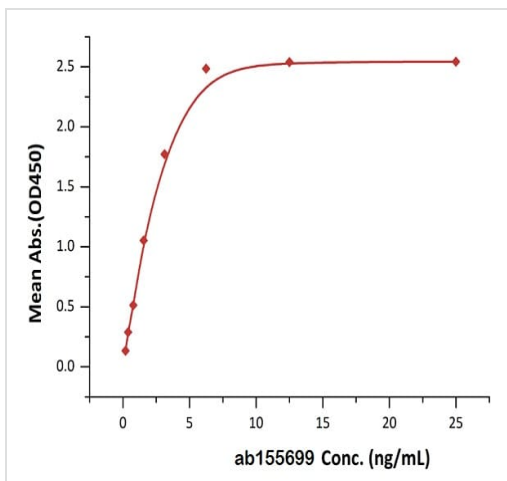
Functional Studies - Recombinant human TNF alpha protein (ab155699)



Immobilized ab155699 at 2 µg/mL (100 µL/well) binds Humira.

Linear range: 0.2-2 ng/mL (QC tested).

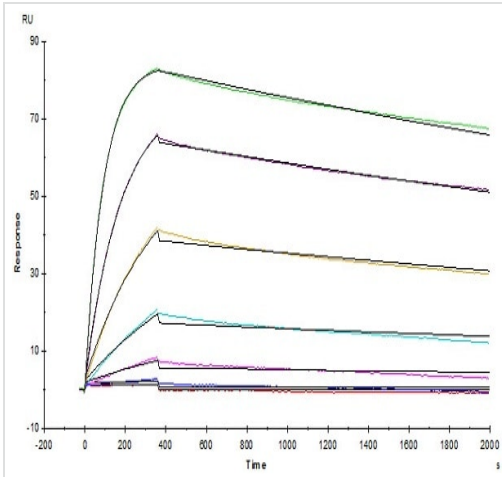
ELISA - Recombinant human TNF alpha protein  
(ab155699)



Immobilized ab155699 at 2 µg/mL (100 µL/well) binds **ab174046**.

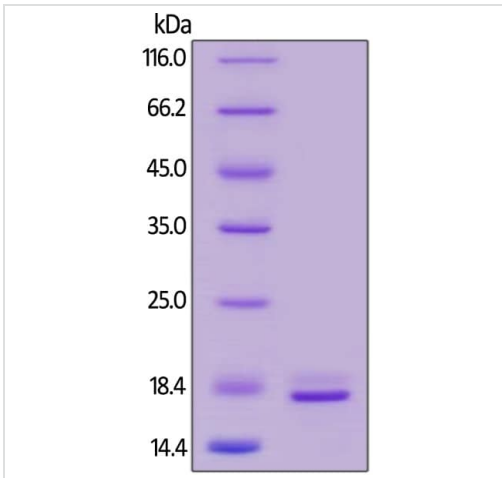
Linear range: 0.2-3 ng/mL (Routinely tested).

ELISA - Recombinant human TNF alpha protein  
(ab155699)



Functional Studies - Recombinant human TNF alpha protein (ab155699)

Humira (Adalimumab) captured on CM5 chip via anti-human IgG Fc antibodies surface, can bind ab155699 with an affinity constant of 0.255 nM, as determined in a SPR assay (Biacore T200) (Routinely tested).

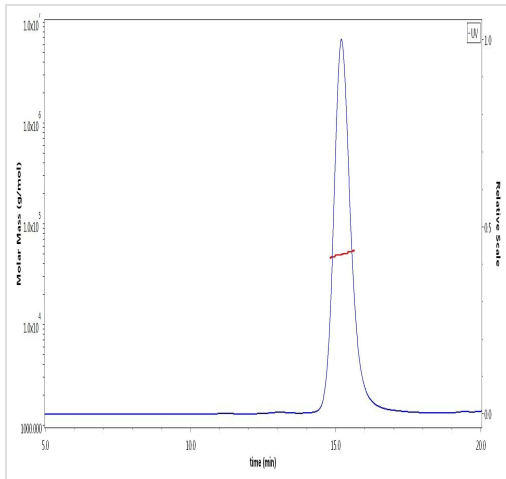


SDS-PAGE - Recombinant human TNF alpha protein (ab155699)

Reduced ab155699 on SDS-PAGE, stained overnight with Coomassie Blue.

Purity of protein >95%

The protein migrates as 17 kDa and 18 kDa under reducing conditions.



Purity of ab155699 was more than 95% in HP-SEC, and around 47-60 kDa verified by SEC-MALS.

SEC-MALS - Recombinant human TNF alpha protein (Active) (ab155699)

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

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