# abcam

## Product datasheet

# Recombinant human Interferon gamma protein (Active) ab9659

4 References 画像数 3

製品の詳細

製品名 Recombinant human Interferon gamma protein (Active)

生理活性 The ED $_{50}$  determined by a cytotoxicity assay using HT-29 cells is  $\leq 0.05$  ng/ml, corresponding to

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specific activity of  $\ge 2 \times 10^7$  units/mg.

精製度 > 98 % SDS-PAGE.

>98%% HPLC analyses. Sterile filtered.

**エンドトキシン・レベル** < 1.000 Eu/μg

発現系 Escherichia coli

アクセッション番号 Q14609

タンパク質長 Full length protein

Animal free No

由来 Recombinant

生物種 Human

配列 MQDPYVKEAE NLKKYFNAGH SDVADNGTLF

LGILKNWKEE SDRKIMQSQI VSFYFKLFKN FKDDQSIQKS VETIKEDMNV KFFNSNKKKR DDFEKLTNYS VTDLNVQRKA IHELIQVMAE

LSPAAKTGKR KRSQMLFQGR RASQ

**予測される分子量** 17 kDa

**領域** 1 to 144

特性

Our **Abpromise guarantee** covers the use of **ab9659** in the following tested applications.

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

アプリケーション Functional Studies

SDS-PAGE

**HPLC** 

製品の状態 Lyophilized

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#### 前処理および保存

保存方法および安定性 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.

Constituent: PBS

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

再構成 Centrifuge vial prior to opening. Reconstitute in 100 µl 1x PBS, pH 8.0 to a concentration of 1.0

mg/ml. Do not vortex. Long term storage: Follow reconstitution with further dilution in a buffer

containing a carrier protein (example; 0.1% BSA).

#### 関連情報

機能 Produced by lymphocytes activated by specific antigens or mitogens. IFN-gamma, in addition to

having antiviral activity, has important immunoregulatory functions. It is a potent activator of macrophages, it has antiproliferative effects on transformed cells and it can potentiate the antiviral

and antitumor effects of the type I interferons.

組織特異性 Released primarily from activated T lymphocytes.

関連疾患 In Caucasians, genetic variation in IFNG is associated with the risk of aplastic anemia (AA)

[MIM:609135]. AA is a rare disease in which the reduction of the circulating blood cells results from damage to the stem cell pool in bone marrow. In most patients, the stem cell lesion is caused by an autoimmune attack. T-lymphocytes, activated by an endogenous or exogenous, and most often unknown antigenic stimulus, secrete cytokines, including IFN-gamma, which would in turn be

able to suppress hematopoiesis.

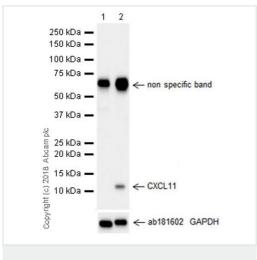
配列類似性 Belongs to the type II (or gamma) interferon family.

翻訳後修飾 Proteolytic processing produces C-terminal heterogeneity, with proteins ending alternatively at

Gly-150, Met-157 or Gly-161.

細胞内局在 Secreted.

#### 画像



Western blot - Recombinant human Interferon gamma protein (ab9659)

**All lanes :** Anti-CXCL11 antibody [EPR21755-173] (<u>ab216157</u>) at 1/1000 dilution

**Lane 1 :** THP-1 (hman monocytic leukemia cell line) whole cell lysate

**Lane 2 :** THP-1 treated with 200 ng/ml interferon-gamma (IFN-gamma, ab9659) and 50 ng/ml lipopolysaccharide (LPS) for 24 hours, then 300 ng/ml Brefeldin A (BFA) was added to the treated cells for 20 hours, whole cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

dilution

Developed using the ECL technique.

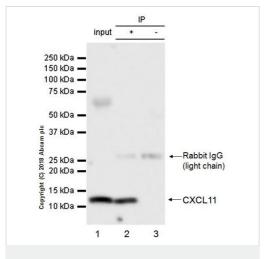
Observed band size: 11 kDa

Exposure time: 37 seconds

Blocking/Dilution: 5% NFDM/TBST

The expression profile observed is consistent with what has been

described in the literature (PMID: 17142784).



Immunoprecipitation - Recombinant human Interferon gamma protein (ab9659)

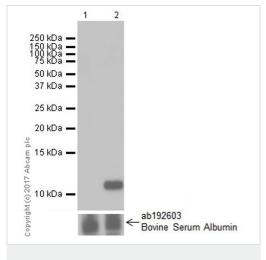
CXCL11 was immunoprecipitated from 0.35mg of THP-1 (human monocytic leukemia cell line) whole cell lysate with <u>ab216157</u> at 1/30 dilution. Western blot was performed from the immunoprecipitate using <u>ab216157</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/5000 dilution.

Lane 1: THP-1 (human monocytic leukemia cell line) treated with 200 ng/ml interferon-gamma (IFN-gamma, ab9659) and 50 ng/ml lipopolysaccharide (LPS) for 24 hours, then added 300 ng/ml Brefeldin A (BFA) for 20 hours, whole cell lysate 10ug (Input).

Lane 2: ab216157 IP in THP-1 treated with 200 ng/ml interferongamma (IFN-gamma, ab9659) and 50 ng/ml lipopolysaccharide (LPS) for 24 hours, then added 300 ng/ml Brefeldin A (BFA) for 20 hours, whole cell lysate.

**Lane 3:** Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab216157</u> in THP-1 treated with 200 ng/ml interferon-gamma (IFN-gamma, ab9659) and 50 ng/ml lipopolysaccharide (LPS) for 24 hours, then added 300 ng/ml Brefeldin A (BFA) for 20 hours, whole cell lysate.

Blocking/Dilution buffer: 5% NFDM/TBST



Western blot - Recombinant human Interferon gamma protein (ab9659)

**All lanes :** Anti-IP10 antibody [EPR20764] (<u>ab214668</u>) at 1/1000 dilution

**Lane 1 :** Untreated THP-1 (human monocytic leukemia cell line) culture supernatant

**Lane 2 :** THP-1 treated with 200 ng/ml interferon-gamma (IFN-gamma, ab9659) and 50 ng/ml lipopolysaccharides (LPS) for 24 hours, culture supernatant

Lysates/proteins at 15 µl per lane.

### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Developed using the ECL technique.

Observed band size: 12 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

 $\ensuremath{\mathsf{IP10}}$  protein secretion can be induced by  $\ensuremath{\mathsf{IFN}}\textsc{-}\mathsf{gamma}$  treatment

(PMID: 11907072).

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