# abcam

### **Product datasheet**

## Recombinant human IL-6 protein (Active) ab259381

★★★★★ <u>1 Abreviews</u> <u>2 References</u> 画像数 5

製品の詳細		
製品名	Recombinant human IL-6 protein (Active)	
生理活性	Fully biologically active when compared to standard. The $ED_{50}$ as determined by the dose-	
	dependant Proliferation of TF-1 cells is 0.8067 ng/mL corresponding to a specific activity of 1.24 x $10^{6}$ IU/mg.	
精製度	>= 95 % SDS-PAGE. Purity by HPLC >=95%.	
エンドトキシン・レベル	< 0.005 Eu/µg	
発現系	HEK 293 cells	
アクセッション番号	<u>P05231</u>	
タンパク質長	Full length protein	
Animal free	Yes	
キャリア・フリー	はい	
由来	Recombinant	
生物種	Human	
配列		APVPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGISALRK ETCNKSNM
		CESSKEALAENNLNLPKMAEKDGCFQSGFNEETCLVKIITGL
		LEFEVYLE YLQNRFESSEEQARAVQMSTKVLIQFLQKKAKNLDAITTPDP
		TTNASLLT
		KLQAQNQWLQDMTTHLILRSFKEFLQSSLRALRQM
予測される分子量	21 kDa	
分子量情報	M+1 Da, pass (+203 Da: Hex, +203: HexNAc, +291:NeuAc).	
領域	28 to 212	
配列の追加情報	N-terminal glycine. Mature chain.	

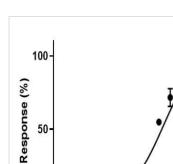
#### 特性

Our Abpromise guarantee covers the use of ab259381 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

	Sandwich ELISA	
	Functional Studies	
	Mass Spectrometry	
	SDS-PAGE	
	HPLC	
製品の状態	Lyophilized	
備考	This protein is filter sterilized prior to aliquoting and lyophilization. All aliquoting and lyophilization steps are performed in a sterile environment	
前処理および保存		
保存方法および安定性	Shipped at Room Temperature. Store at Room Temperature.	
	pH: 6.00 Constituents: 0.727% Dibasic monohydrogen potassium phosphate, 0.248% Monobasic dihydrogen potassium phosphate, 10.26% Trehalose	
	Buffer lyophilized from.	
	This product is an active protein and may elicit a biological response in vivo, handle with caution.	
再構成	Reconstitute with phosphate buffered saline.Store lyophilized form at room temperature. Reconstitute, aliquot and store at -80°C for 12 months or +4°C for 1 week.Avoid repeated freeze- thaw. Lyophilized contents may appear as either a translucent film or a white powder. This variance does not affect the quality of the product.	
関連情報		
機能	Cytokine with a wide variety of biological functions. It is a potent inducer of the acute phase response. Plays an essential role in the final differentiation of B-cells into lg-secreting cells Involved in lymphocyte and monocyte differentiation. It induces myeloma and plasmacytoma growth and induces nerve cells differentiation Acts on B-cells, T-cells, hepatocytes, hematopoeitic progenitor cells and cells of the CNS. Also acts as a myokine. It is discharged into the bloodstream after muscle contraction and acts to increase the breakdown of fats and to improve insulin resistance.	
関連疾患	Genetic variations in IL6 are associated with susceptibility to rheumatoid arthritis systemic juvenile (RASJ) [MIM:604302]. An inflammatory articular disorder with systemic-onset beginning before the age of 16. It represents a subgroup of juvenile arthritis associated with severe extraarticular features and occasionally fatal complications. During active phases of the disorder, patients display a typical daily spiking fever, an evanescent macular rash, lymphadenopathy, hepatosplenomegaly, serositis, myalgia and arthritis. Note=A IL6 promoter polymorphism is associated with a lifetime risk of development of Kaposi sarcoma in HIV-infected men.	
配列類似性	Belongs to the IL-6 superfamily.	
翻訳後修飾	N- and O-glycosylated.	
細胞内局在	Secreted.	



0.01

0-

0.001

画像

Fully biologically active when compared to standard. The  $\mathsf{ED}_{50}$  as determined by the dose-dependant Proliferation of TF-1 cells is 0.8067 ng/mL corresponding to a specific activity of 1.24 x 10<sup>6</sup> IU/mg.

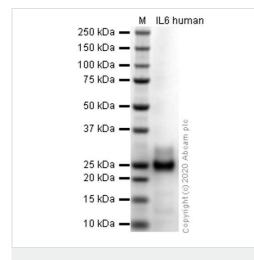
Functional Studies - Recombinant human IL-6 protein (Active) (ab259381)

0.1

1 Human IL-6 (ng/ml)

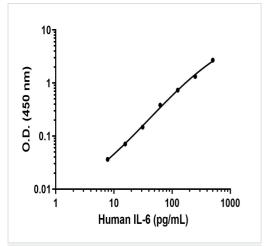
10

100



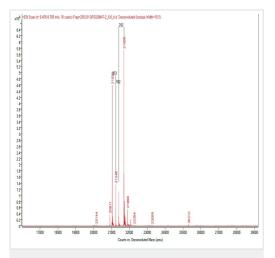
SDS-PAGE - Recombinant human IL-6 protein (Active) (ab259381)

SDS-PAGE analysis of ab259381.



Sandwich ELISA - Recombinant human IL-6 protein (Active) (ab259381)

HPLC - Recombinant human IL-6 protein (Active) (ab259381)



Mass Spectrometry - Recombinant human IL-6 protein (Active) (ab259381) Sandwich ELISA - Recombinant human IL-6 protein standard curve.

Background subtracted standard curve using Human IL-6 Antibody Pair - BSA and Azide free (ab243973) and Recombinant human IL-6 protein (Active) (ab259381) in sandwich ELISA. The ELISA was performed using the components of the corresponding SimpleStep® kit, which uses the same antibody pair with a different formulation and format.

Purity 99%.

The spectrum was recorded using a 1260 Infinity II HPLC system with DAD and a MabPac RP column (3.0x100 mm, 4 µm). 5 µL of purified protein was injected and the gradient run from 80 % water:TFA (99.9:0.1 v/v) and 20 % acetonitrile:water:TFA (90:9.9:0.1 v/v) to 20 % water:TFA (99.9:0.1 v/v) and 80 % acetonitrile:water:TFA (90:9.9:0.1 v/v/v) within 3 minutes followed by an isocratic step for another 3 min. Flow rate was 0.5 mL/min and the column compartment temperature was 50 °C.

M+1 Da, pass (+203 Da: Hex, +203: HexNAc, +291:NeuAc).

The spectrum was recorded with a 6545XT AdvanceBio LC/Q-TOF (Agilent Technologies) and a MabPac RP column (42.1x50 mm, 4  $\mu$ m, Thermo Scientific). 5  $\mu$ L of purified protein was injected and the gradient run from 85 % water:FA (99.9:0.1 v/v) and 15 % acetonitrile:FA (90:9.9:0.1 v/v/v) to 55 % water:FA (99.9:0.1 v/v) and 45 % acetonitrile:FA (90:9.9:0.1 v/v/v) within 3 minutes followed by an isocratic step for another 2.5 min. Flow rate was 0.4 mL/min and the column compartment temperature was 60 °C. Data was analysed and deconvoluted using the Bioconfirm software (Agilent Technologies).

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