The company, mAbProtein, has been established to help patients, doctors, and researchers.



# Recombinant human Interleukin-18 (IL-18) (37-193) protein

protein and peptide	
P-I-001	
Recombinant protein of human IL-18 <sup>37-193</sup>	
E. coli	
Bacterially expressed and purified full-length human IL-18 was cleaved by active caspase-4 <sup>105-377</sup> . The N-terminal Tyr of the IL-18 neoepitope was confirmed by Edman degradation sequencing.	
Q14116	
IGIF, IL1F4	
3606	
001	
1 mg/mL	
0.2 μm filtered solution in PBS, pH7.4	
>95%, by SDS-PAGE	
Store at -80°C.	



# Purification method.

IL-18 and caspase- $4^{105-377}$  were expressed in *E. coli*, and purified using Ni-NTA agarose. A mixture of these proteins (IL-18: Caspase- $4^{105-377}$  =10:1) was incubated and then run through a Ni-NTA agarose column. The flow-through was collected as IL-18<sup>37-193</sup>.

The N-terminal Tyr of IL-18<sup>37-193</sup> was confirmed by Edman degradation sequencing.

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### Capillary Western immunoassay (WES)

Characterization of novel mAbs against the neoepitope of human IL-18 cleaved by inflammatory caspase-1/4

Capillary Western immunoassay (WES) of serial dilutions of bacterially purified IL-18 protein cleaved by caspase-4 (IL-18<sup>37-193</sup>) (Catalog # P-I-001) and Met-IL-1837-193 with the newly generated neoepitope mAb (Catalog # R-I-002, right panel) and anti-IL-18 mAb (Catalog # R-I-001, left panel).



# Background

This gene encodes a member of the interleukin-1 (IL-1) family of cytokines. In addition to its role in the inflammatory response to microbes, recent studies implicate IL-18 as an important factor in human autoimmune, autoinflammatory, allergic, neurological and metabolic diseases. Similar to IL-1β, pro-IL-18 is processed by inflammatory caspase-1 or caspase-4 to yield mature, active form (IL-18<sup>37-193</sup>).

# References for recombinant human IL-18<sup>37-193</sup> protein (P-I-001)

PMID:	30615852	Journal:	Archives of Biochemistry and Biophysics
		IF (2020):	4.013
Title:	Generation and characterization antibodies with high affinity: Tw the neoepitope of the inflammate	n of antagonistic o types of monoc ory caspase-cleav	c anti-human interleukin (IL)-18 monoclonal clonal antibodies against full-length IL-18 and ved active IL-18