

# CD55/DAF Protein, Human (HEK293, His)

Catalog No: tcmp74701



## Available Sizes

**Size:** 10μg

**Size:** 50μg

**Size:** 100μg



## Specifications

### Species Reactivity:

Human

### Form:

Lyophilized powder.

### Source:

HEK293

### Purity / Grade:

Greater than 95% as determined by reducing SDS-PAGE.

### Endotoxin Level:

### Storage Instruction:

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

### Alternative Names:

Complement Decay-Accelerating factor; CD55; CR; DAF

### SwissProt:

P08174 (D35-S353)

### Calculated Molecular Weight:

50-75 kDa

**Sequence:**

DCGLPPDVPNAQPALEGRTSFPEDTVITYKCEESFVKIPGEKDSVICLKGSQWSDIEEFCNRSCEVPTRLNSASLKQPYITQNYFPVGTVVE  
YECRPGYRREPSLSPKLTCLQNLKWSTAVEFCKKKSCPNPGEIRNGQIDVPGGILFGATISFSCNTGYKLFGSTSSFCLISGSSVQWSDPLP  
ECREIYCPAPPQIDNGIIQGERDHYGYRQSVTYACNKGFTMIGEHSIYCTVNNDEGEWSGPPPECRGKSLTSKVPPTVQKPPTTVNVPTTE  
VSPTSQKTTTKTTTPNAQATRSTPVSRTTKHFFHETTPNKGSGTTS

**Tags:**

C-6\*His

**Product Description**

The CD55/DAF protein is critical in the immune system, recognizing C4b and C3b fragments, interfering with their enzymatic conversion and preventing the formation of complement cascade amplifying convertase. This regulatory mechanism alleviates complement-induced damage by inhibiting complement activation. CD55/DAF Protein, Human (HEK293, His) is the recombinant human-derived CD55/DAF protein, expressed by HEK293 , with C-6\*His labeled tag. The total length of CD55/DAF Protein, Human (HEK293, His) is 319 a.a., with molecular weight of 50-75 kDa.

CD55/DAF Protein plays a crucial role in the immune system by recognizing C4b and C3b fragments generated during C4 and C3 activation. Its interaction with cell-associated C4b and C3b polypeptides interferes with their ability to catalyze the conversion of C2 and factor B to enzymatically active C2a and Bb, preventing the formation of C4b2a and C3bBb, the amplification convertases of the complement cascade. This interference serves as a regulatory mechanism, inhibiting complement activation and preventing the formation of C3 and C5 convertases, thereby mitigating complement-induced damage. Notably, CD55/DAF also acts as a receptor for Coxsackievirus A21, as well as coxsackieviruses B1, B3, and B5 during microbial infection, highlighting its diverse roles in immune regulation and viral recognition.



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