

# Datasheet for ABIN7121236

# C3 Protein (His tag)



## Overview

Background:

Quantity:	100 μg
Target:	C3
Origin:	Cynomolgus
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This C3 protein is labelled with His tag.
Product Details	
Purpose:	Cynomolgus Complement component 3 / Complement C3 Protein, His Tag (MALS verified)
Sequence:	Thr 23 - Asn 1663
Characteristics:	Cynomolgus Complement component 3, His Tag (CO3-C52H5) is expressed from human 293
	cells (HEK293). It contains AA Thr 23 - Asn 1663 (Accession # G7PYU9-1).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per μg by the LAL method.
Grade:	MALS verified
Target Details	
Target:	C3
Alternative Name:	Complement component 3 / Complement C3 (C3 Products)

Synonyms: Complement C3,CPAMD1,

Description: C3 is the major complement component serum. It is mainly synthesized by macrophages and liver. C3 plays a central role in the activation of the complement system. Its processing by C3 convertase is the central reaction in both classical and alternative complement pathways. It is cleaved into two fragments, C3a and C3b. C3a anaphylatoxin is a mediator of local inflammatory process. In chronic inflammation, acts as a chemoattractant for neutrophils. After activation C3b can bind covalently, via its reactive thioester, to cell surface carbohydrates or immune aggregates. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes.

Molecular Weight:

71.3 kDa (β chain) and 113.0 kDa (α chain)

Pathways:

Complement System, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Regulation of G-Protein Coupled Receptor Protein Signaling

### **Application Details**

**Application Notes:** 

This protein carries a polyhistidine tag at the C-terminus. The mature form of Complement component 3 is a disulfide-linked heterodimer composed of proteolytically cleaved  $\alpha$  and  $\beta$  chain. Each  $\alpha$  and  $\beta$  chain has a calculated MW of 71.3 kDa ( $\beta$  chain) and 113.0 kDa ( $\alpha$  chain). The protein migrates as 64-68 kDa ( $\beta$  chain) and kDa ( $\alpha$  chain) and kDa (intact Complement component 3) under reducing (R) condition due to glycosylation.

Restrictions:

For Research Use only

### Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Storage:	-20 °C
Storage Comment:	-20°C