


### Anti-MOCS3 antibody ab154107

[1 References](#) [1 Image](#)

#### Overview

<b>Product name</b>	Anti-MOCS3 antibody
<b>Description</b>	Rabbit polyclonal to MOCS3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Pig 
<b>Immunogen</b>	Recombinant fragment, corresponding to a region within amino acids 220-460 of Human MOCS3 (Uniprot ID: O95396).
<b>Positive control</b>	A549, HeLa, HepG2 and HCT116 whole cell lysates.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab154107 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 50 kDa.

## Target

### Function

Plays a central role in 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of tRNA(Lys), tRNA(Glu) and tRNA(Gln). Also essential during biosynthesis of the molybdenum cofactor. Acts by mediating the C-terminal thiocarboxylation of sulfur carriers URM1 and MOCS2A. Its N-terminus first activates URM1 and MOCS2A as acyl-adenylates (-COAMP), then the persulfide sulfur on the catalytic cysteine is transferred to URM1 and MOCS2A to form thiocarboxylation (-COSH) of their C-terminus. The reaction probably involves hydrogen sulfide that is generated from the persulfide intermediate and that acts as nucleophile towards URM1 and MOCS2A. Subsequently, a transient disulfide bond is formed. Does not use thiosulfate as sulfur donor; NFS1 probably acting as a sulfur donor for thiocarboxylation reactions.

### Pathway

tRNA modification; 5-methoxycarbonylmethyl-2-thiouridine-tRNA biosynthesis.  
Cofactor biosynthesis; molybdopterin biosynthesis.

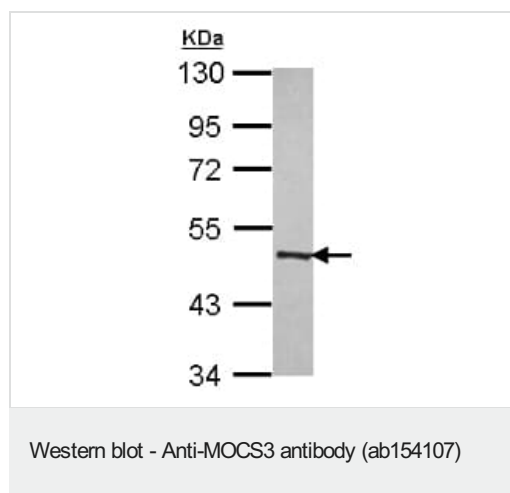
### Sequence similarities

In the N-terminal section; belongs to the hesA/moeB/thiF family. UBA4 subfamily.  
Contains 1 rhodanese domain.

### Cellular localization

Cytoplasm > cytosol.

## Images



Anti-MOCS3 antibody (ab154107) at 1/1000 dilution + HeLa whole cell lysate at 30 µg

**Predicted band size:** 50 kDa

10% SDS PAGE

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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