

## Product datasheet

# Anti-MOCS3 antibody ab57229

1 Image

### Overview

<b>Product name</b>	Anti-MOCS3 antibody
<b>Description</b>	Mouse monoclonal to MOCS3
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein, corresponding to amino acids 1-461 of Human MOCS3

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: None PBS, pH 7.2
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG2b
<b>Light chain type</b>	kappa

### Applications

Our [Abpromise guarantee](#) covers the use of **ab57229** in the following tested applications.

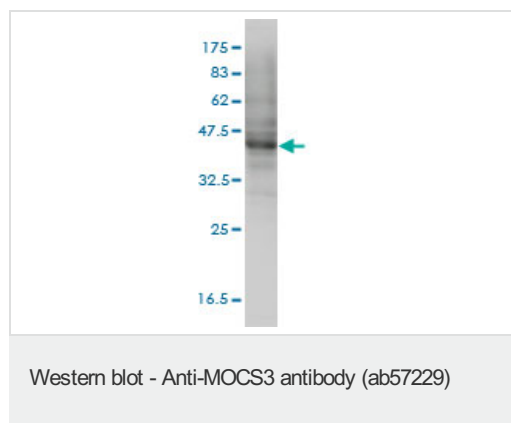
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 - 5 µg/ml. Predicted molecular weight: 50 kDa.

### Target

<b>Function</b>	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.
<b>Pathway</b>	tRNA modification; 5-methoxycarbonylmethyl-2-thiouridine-tRNA biosynthesis. Cofactor biosynthesis; molybdopterin biosynthesis.
<b>Sequence similarities</b>	In the N-terminal section; belongs to the hesA/moeB/thiF family. UBA4 subfamily. Contains 1 rhodanese domain.
<b>Cellular localization</b>	Cytoplasm > cytosol.

## Images



MOCS3 antibody (ab57229) at 1ug/lane +  
HeLa cell lysate at 25ug/lane.

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