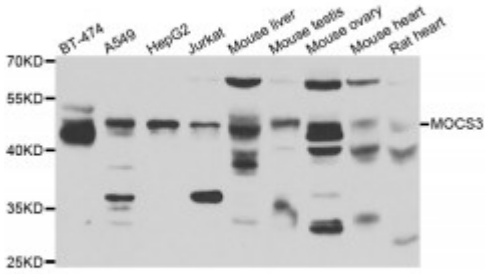
Anti-MOCS3 Antibody



Description	Molybdenum cofactor (MoCo) is necessary for the function of all molybdoenzymes. The protein encoded by this gene adenylates and activates molybdopterin synthase, an enzyme required for biosynthesis of MoCo. This gene contains no introns. A pseudogene of this gene is present on chromosome 14.

Model	STJ115378
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 271-460 of human MOCS3 (NP_055299.1).
Gene ID	27304
Gene Symbol	MOCS3
Dilution range	WB 1:500 - 1:2000
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Adenylyltransferase and sulfurtransferase MOCS3 Molybdenum cofactor synthesis protein 3 Molybdopterin synthase sulfurylase MPT synthase sulfurylase
Molecular Weight	49.669 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:15765OMIM:609277Reactome:R-HSA-947581
Alternative Names	Adenylyltransferase and sulfurtransferase MOCS3 Molybdenum cofactor synthesis protein 3 Molybdopterin synthase sulfurylase MPT synthase sulfurylase
Function	Plays a central role in 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of cytosolic 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
Cellular Localization	Cytoplasm