

**CALCOCO2 (14R16) Mouse Monoclonal antibody**  
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**Catalog # AP93859****Specification****CALCOCO2 (14R16) Mouse Monoclonal antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">Q13137</a>
Reactivity	Human, Monkey
Clonality	Monoclonal
Calculated MW	52254

**CALCOCO2 (14R16) Mouse Monoclonal antibody - Additional Information****Gene ID** 10241**Other Names**

Calcium-binding and coiled-coil domain-containing protein 2, Antigen nuclear dot 52 kDa protein, Nuclear domain 10 protein NDP52, Nuclear domain 10 protein 52, Nuclear dot protein 52, CALCOCO2, NDP52 {ECO:0000303|PubMed:7540613}

**Dilution**

WB~~1:1000  
IF~~1:50~200

**Storage Conditions**

-20°C

**CALCOCO2 (14R16) Mouse Monoclonal antibody - Protein Information****Name** CALCOCO2**Synonyms** NDP52 {ECO:0000303|PubMed:7540613}**Function**

Xenophagy-specific receptor required for autophagy-mediated intracellular bacteria degradation. Acts as an effector protein of galectin-sensed membrane damage that restricts the proliferation of infecting pathogens such as *Salmonella typhimurium* upon entry into the cytosol by targeting LGALS8-associated bacteria for autophagy (PubMed:<a href="http://www.uniprot.org/citations/22246324" target="\_blank">22246324</a>). Initially orchestrates bacteria targeting to autophagosomes and subsequently ensures pathogen degradation by regulating pathogen-containing autophagosome maturation (PubMed:<a href="http://www.uniprot.org/citations/23022382" target="\_blank">23022382</a>, PubMed:<a href="http://www.uniprot.org/citations/25771791" target="\_blank">25771791</a>). Bacteria targeting to autophagosomes relies on its interaction with MAP1LC3A, MAP1LC3B and/or GABARAPL2, whereas regulation of pathogen-containing autophagosome maturation requires the interaction with MAP3LC3C (PubMed:<a href="http://www.uniprot.org/citations/23022382" target="\_blank">23022382</a>, PubMed:<a href="http://www.uniprot.org/citations/25771791" target="\_blank">25771791</a>).

target="\_blank">25771791</a>). May play a role in ruffle formation and actin cytoskeleton organization and seems to negatively regulate constitutive secretion (PubMed:<a href="http://www.uniprot.org/citations/17635994" target="\_blank">17635994</a>).

#### Cellular Location

Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton. Cytoplasmic vesicle, autophagosome membrane; Peripheral membrane protein. Note=According to PubMed:7540613, localizes to nuclear dots. According to PubMed:9230084 and PubMed:12869526, it is not a nuclear dot-associated protein but localizes predominantly in the cytoplasm with a coarse-grained distribution preferentially close to the nucleus.

#### Tissue Location

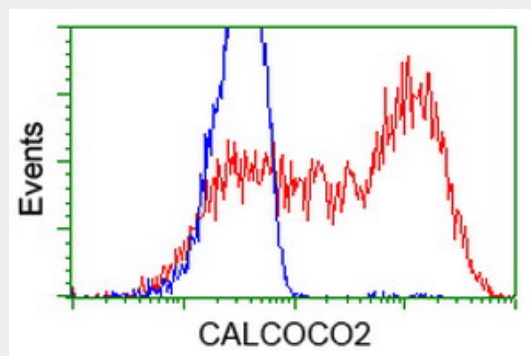
Expressed in all tissues tested with highest expression in skeletal muscle and lowest in brain

### CALCOCO2 (14R16) Mouse Monoclonal antibody - Protocols

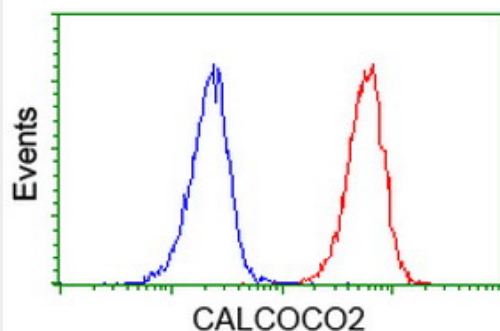
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CALCOCO2 (14R16) Mouse Monoclonal antibody - Images



HEK293T cells transfected with either overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-CALCOCO2 antibody (AP93859), and then analyzed by flow cytometry.



Flow cytometric Analysis of Jurkat cells, using anti-CALCOCO2 antibody (AP93859), (Red), compared to a nonspecific negative control antibody, (Blue).

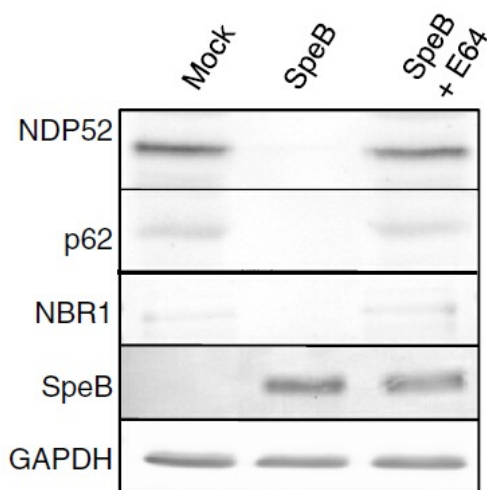
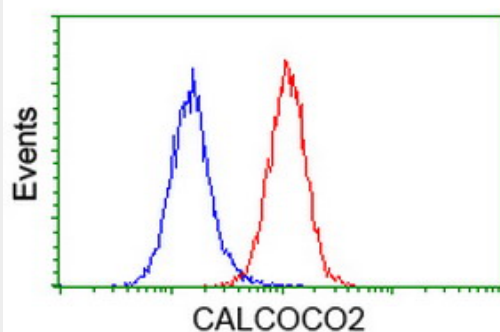
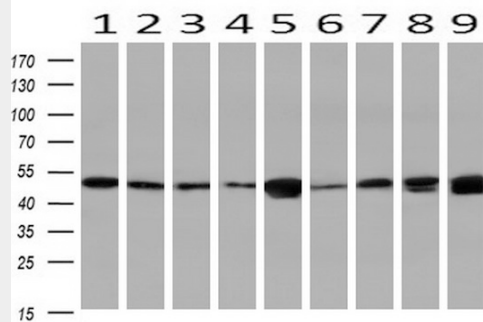


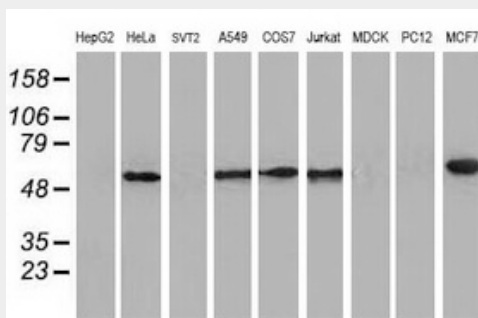
Figure from citation: Western Blot of CALCOCO2 (NDP52) protein level by using anti-CALCOCO2 antibody in human HEp-2 cell lysates.



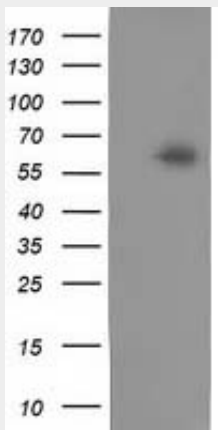
Flow cytometric Analysis of Hela cells, using anti-CALCOCO2 antibody (AP93859), (Red), compared to a nonspecific negative control antibody, (Blue).



Western blot analysis of extracts (10ug) from 9 Human tissue by using anti-CALCOCO2 monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon).



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-CALCOCO2 monoclonal antibody.



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CALCOCO2 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CALCOCO2 (Cat# AP93859). Positive lysates (100ug) and (20ug) can be purchased separately from biodragon.

#### CALCOCO2 (14R16) Mouse Monoclonal antibody - Background

The protein encoded by this gene is a subunit of nuclear domain 10 (ND10) bodies. ND10 bodies are nuclear domains appearing immunohistochemically as ten dots per nucleus. They are believed to be associated with the nuclear matrix on the basis of their resistance to nuclease digestion and salt extraction. ND10 proteins are removed from the nucleus by herpes simplex virus-1 infection and may have a role in viral life cycles. [provided by RefSeq]. COMPLETENESS: complete on the 3' end.