

CALCOCO2 (14R16) Mouse Monoclonal antibody

CALCOCO2 (14R16) Mouse Monoclonal antibody Catalog # AP93859

Product Information

Application WB, IF **Primary Accession** Q13137

Reactivity Human, Monkey
Clonality Monoclonal
Calculated MW 52254

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

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

organization and seems to negatively regulate constitutive secretion

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:22246324). Initially orchestrates bacteria targeting to autophagosomes and subsequently ensures pathogen degradation by regulating pathogen-containing autophagosome maturation (PubMed:23022382, PubMed:25771791). 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:23022382, PubMed:25771791). May play a role in ruffle formation and actin cytoskeleton

(PubMed: 17635994).

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.

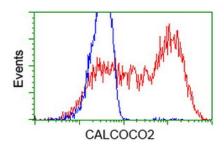
Tissue Location

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

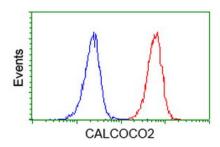
Background

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.

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).

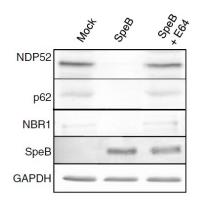
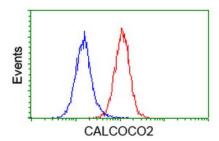
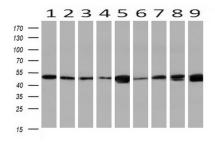


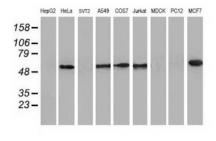
Figure from citation: Western Blot of CALCOCO2 (NDP52) protein level by using anti-CALCOCO2 antibody in human HEp-2 cell lysates.

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

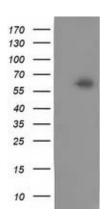




Western blot analysis of extracts (10ug) from 9 Human tissue by using anti-CALCOCO2 monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon).



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.