

CALCOCO2 Rabbit Polyclonal Antibody

CALCOCO2 Rabbit Polyclonal Antibody Catalog # AP93440

Specification

CALCOCO2 Rabbit Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB <u>Q13137</u> Rat, Human, Mouse Polyclonal, Rabbit,IgG Polyclonal 52254

CALCOCO2 Rabbit Polyclonal 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}

Storage Conditions -20°C

CALCOCO2 Rabbit Polyclonal 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: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:23022382, PubMed:25771791). May play a role in ruffle formation and actin cytoskeleton organization and seems to negatively regulate constitutive secretion (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

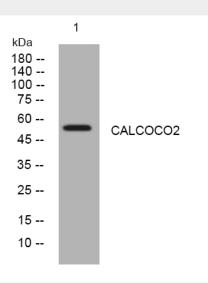
Expressed in all tissues tested with highest expression in skeletal muscle and lowest in brain

CALCOCO2 Rabbit Polyclonal Antibody - Protocols

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

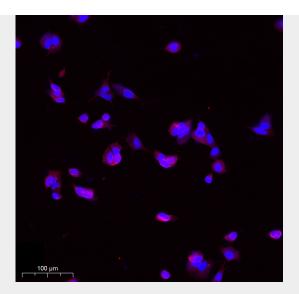
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CALCOCO2 Rabbit Polyclonal Antibody - Images



Western blot analysis of lysates from SW480 cells, primary antibody was diluted at 1:1000, 4°over night





Immunofluorescence analysis of MCF7 cell. 1,primary Antibody was diluted at 1:100(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - AFluor 594 Secondary antibody was diluted at 1:500(room temperature, 50min).

CALCOCO2 Rabbit Polyclonal Antibody - Background

This gene encodes a coiled-coil domain-containing protein. The encoded protein functions as a receptor for ubiquitin-coated bacteria and plays an important role in innate immunity by mediating macroautophagy. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012],