

KIAA1618 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP13344c

Specification

KIAA1618 Antibody (Center) Blocking peptide - Product Information

Primary Accession

Q63HN8

KIAA1618 Antibody (Center) Blocking peptide - Additional Information

Gene ID 57674

Other Names

E3 ubiquitin-protein ligase RNF213, 632-, ALK lymphoma oligomerization partner on chromosome 17, Mysterin, RING finger protein 213, RNF213, ALO17, C17orf27, KIAA1554, KIAA1618, MYSTR

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13344c was selected from the Center region of KIAA1618. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KIAA1618 Antibody (Center) Blocking peptide - Protein Information

Name RNF213 (<u>HGNC:14539</u>)

Function

Atypical E3 ubiquitin ligase that can catalyze ubiquitination of both proteins and lipids, and which is involved in various processes, such as lipid metabolism, angiogenesis and cell-autonomous immunity (PubMed:21799892, PubMed:26126547, PubMed:26278786, PubMed:26766444, PubMed:30705059, PubMed:32139119, PubMed:34012115, PubMed:34012115, Acts as a key immune sensor by catalyzing ubiquitination of the lipid A moiety of bacterial lipopolysaccharide (LPS) via its RZ-type zinc- finger: restricts the

proliferation of cytosolic bacteria, such as Salmonella, by generating the bacterial ubiquitin coat



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through the ubiquitination of LPS (PubMed:34012115). Also acts indirectly by mediating the recruitment of the LUBAC complex, which conjugates linear polyubiquitin chains (PubMed:34012115).

Ubiquitination of LPS triggers cell-autonomous immunity, such as antibacterial autophagy, leading to degradation of the microbial invader (PubMed:34012115). Involved in lipid metabolism by regulating fat storage and lipid droplet formation; act by inhibiting the lipolytic process (PubMed:<a href="http://www.uniprot.org/citations/30705059"

target="_blank">30705059). Also regulates lipotoxicity by inhibiting desaturation of fatty acids (PubMed:<a href="http://www.uniprot.org/citations/30846318"

target="_blank">30846318). Also acts as an E3 ubiquitin-protein ligase via its RING-type zinc finger: mediates 'Lys-63'-linked ubiquitination of target proteins (PubMed:32139119, PubMed:33842849). Involved in the non-canonical Wnt signaling pathway in vascular development: acts by mediating ubiquitination and degradation of FLNA and NFATC2 downstream of RSPO3, leading to inhibit the non-canonical Wnt signaling pathway and promoting vessel regression (PubMed:26766444). Also has ATPase activity; ATPase activity is required for ubiquitination of LPS (PubMed:34012115/a>).

Cellular Location

Cytoplasm, cytosol. Lipid droplet

Tissue Location

Widely expressed (at protein level). [Isoform 2]: Minor isoform with restricted expression.

KIAA1618 Antibody (Center) Blocking peptide - Protocols

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

• Blocking Peptides

KIAA1618 Antibody (Center) Blocking peptide - Images

KIAA1618 Antibody (Center) Blocking peptide - Background

There are three isoforms. A chromosomal aberration involving KIAA1618 is associated with anaplastic large-cell lymphoma (ALCL). Translocation t(2;17)(p23;q25) with ALK.

KIAA1618 Antibody (Center) Blocking peptide - References

Choudhary, C., et al. Science 325(5942):834-840(2009)Dephoure, N., et al. Proc. Natl. Acad. Sci. U.S.A. 105(31):10762-10767(2008)Han, G., et al. Proteomics 8(7):1346-1361(2008)Hmami, K., et al. Anal Sci 24(1):161-166(2008)Bechtel, S., et al. BMC Genomics 8, 399(2007):