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KLHL25 Antibody (Internal)
Chicken Polyclonal Antibody
Catalog # ALS13824

Specification

KLHL25 Antibody (Internal) - Product Information

Application	**ICC, IF, WB, IHC**
Primary Accession	Q9H0H3
Reactivity	**Human**
Host	**Chicken**
Clonality	**Polyclonal**
Calculated MW	**66kDa KDa**

KLHL25 Antibody (Internal) - Additional Information

Gene ID 64410

Other Names
Kelch-like protein 25, Ectoderm-neural cortex protein 2, ENC-2, KLHL25, ENC2

Target/Specificity
Human KLHL25

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
KLHL25 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

KLHL25 Antibody (Internal) - Protein Information

Name KLHL25 {ECO:0000303|PubMed:22578813, ECO:0000312|HGNC:HGNC:25732}

Function
Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex involved in various processes, such as translation homeostasis and lipid synthesis (PubMed:22578813, PubMed:27664236, PubMed:34491895). The BCR(KLHL25) ubiquitin ligase complex acts by mediating ubiquitination of hypophosphorylated EIF4EBP1 (4E-BP1): ubiquitination and subsequent degradation of hypophosphorylated EIF4EBP1 (4E-BP1) probably serves as a homeostatic mechanism to maintain translation and prevent eIF4E inhibition when eIF4E levels are low (PubMed:22578813). The BCR(KLHL25) complex does not target EIF4EBP1 (4E-BP1) when it is hyperphosphorylated or associated with eIF4E (PubMed:22578813). The BCR(KLHL25) complex also acts as a regulator of lipid

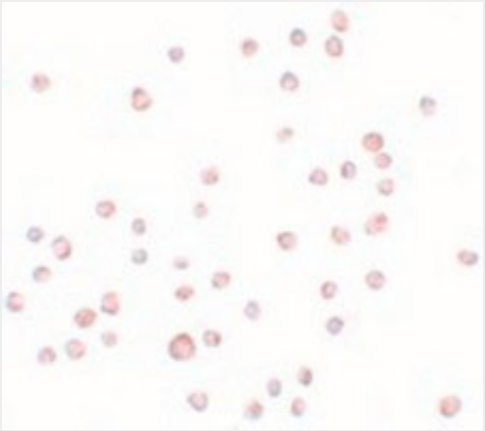
synthesis by mediating ubiquitination and degradation of ACLY, thereby inhibiting lipid synthesis (PubMed:27664236, PubMed:34491895). BCR(KLHL25)-mediated degradation of ACLY promotes fatty acid oxidation and is required for differentiation of inducible regulatory T (iTreg) cells (PubMed:34491895).

KLHL25 Antibody (Internal) - Protocols

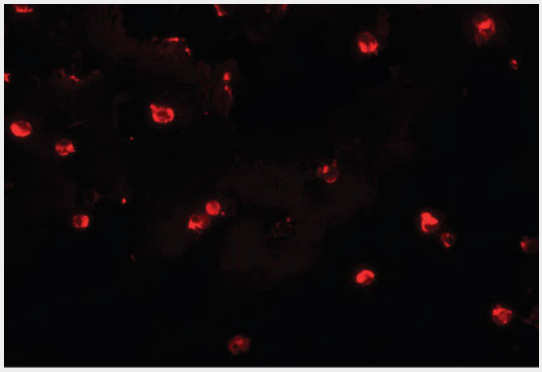
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KLHL25 Antibody (Internal) - Images

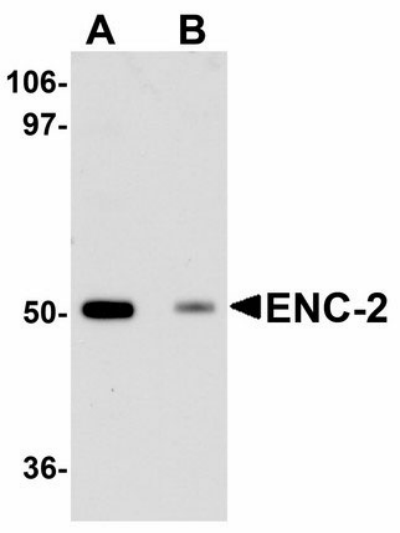


Immunocytochemistry of ENC-2 in Jurkat cells with ENC-2 antibody at 5 ug/ml.

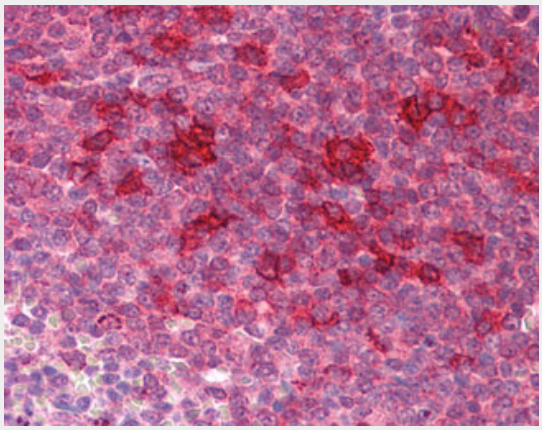


Immunofluorescence of ENC-2 in Jurkat cells with ENC-2 antibody at 20 ug/ml.

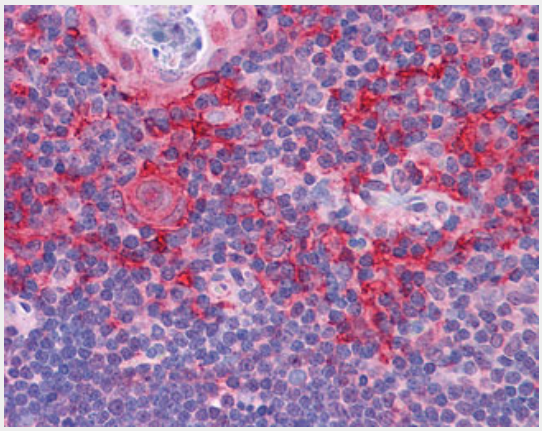
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Western blot of ENC-2 in Jurkat cell lysate with ENC-2 antibody at 1 ug/ml in (A) the absence...

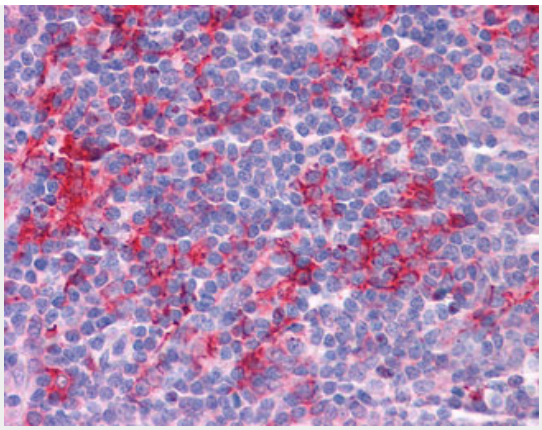


Anti-KLHL25 antibody IHC of human spleen.



Anti-KLHL25 antibody IHC of human thymus.

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Anti-KLHL25 antibody IHC of human tonsil.

KLHL25 Antibody (Internal) - Background

Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex required for translational homeostasis. The BCR(KLHL25) ubiquitin ligase complex acts by mediating ubiquitination of hypophosphorylated EIF4EBP1 (4E-BP1): ubiquitination and subsequent degradation of hypophosphorylated EIF4EBP1 (4E-BP1) probably serves as a homeostatic mechanism to maintain translation and prevent eIF4E inhibition when eIF4E levels are low. The BCR(KLHL25) complex does not target EIF4EBP1 (4E-BP1) when it is hyperphosphorylated or associated with eIF4E.

KLHL25 Antibody (Internal) - References

Corcoran M.M.,et al.Submitted (SEP-2004) to the EMBL/GenBank/DDBJ databases.
Wiemann S.,et al.Genome Res. 11:422-435(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Zody M.C.,et al.Nature 440:671-675(2006).
Dephoure N.,et al.Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).