

KLHL25 Antibody (Internal)
Chicken Polyclonal Antibody
Catalog # ALS13824**Specification****KLHL25 Antibody (Internal) - Product Information**

Application	ICC, IF, WB, IHC
Primary Accession	O9H0H3
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

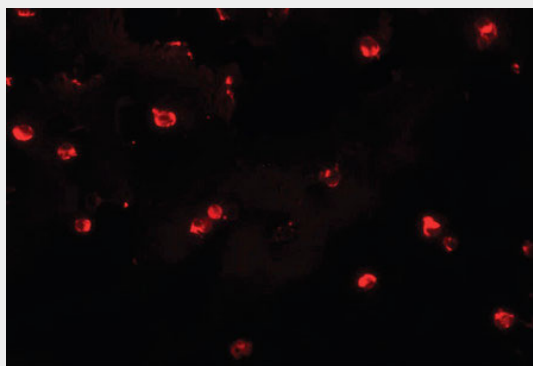
Provided below are standard protocols that you may find useful for product applications.

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

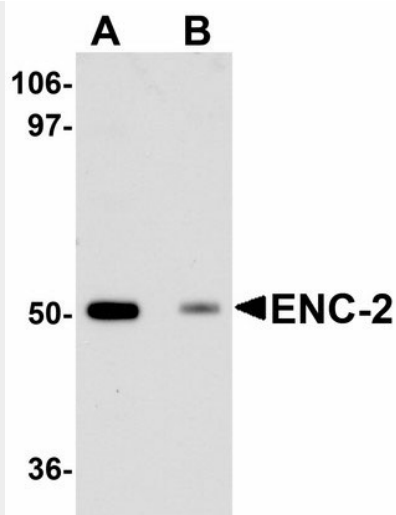
KLHL25 Antibody (Internal) - Images



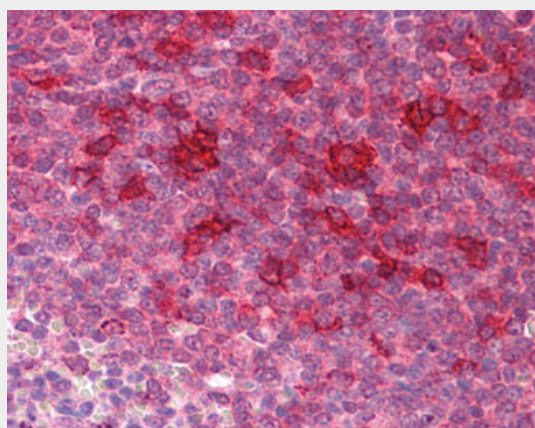
Immunocytochemistry of ENC-2 in Jurkat cells with ENC-2 antibody at 5 ug/ml.



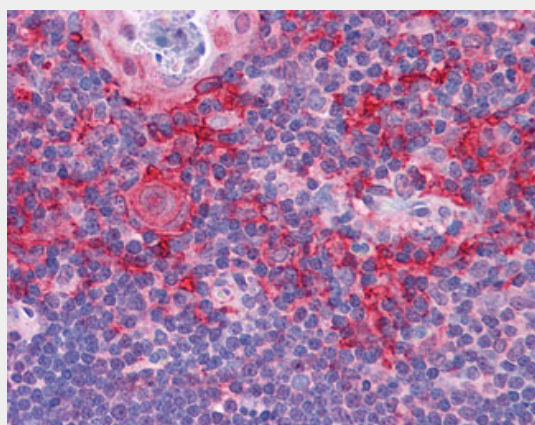
Immunofluorescence of ENC-2 in Jurkat cells with ENC-2 antibody at 20 ug/ml.



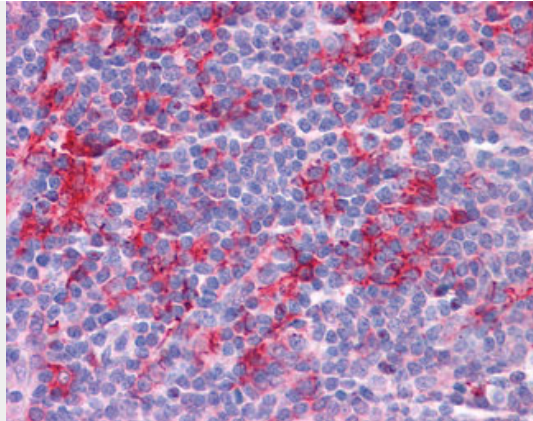
Western blot of ENC-2 in Jurkat cell lysate with ENC-2 antibody at 1 ug/ml in (A) the absence...



Anti-KLHL25 antibody IHC of human spleen.



Anti-KLHL25 antibody IHC of human thymus.



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).