

# EULIR (H-300): sc-134976

## BACKGROUND

EULIR (E3 ubiquitin-protein ligase for inhibin receptor), also known as HECTD1, functions as an E3 ubiquitin ligase. As such, EULIR is a major component of the ubiquitin-proteasome system and plays a role in determining the specificity of ubiquitin conjugation. It is responsible for transferring ubiquitin to targeted substrates from an E2 ubiquitin-conjugating enzyme through the intermediate formation of a thiol ester with ubiquitin. Similar to a number of other E3 ubiquitin ligases, EULIR contains an N-terminal Ankyrin repeat domain, a mind bomb (MIB) domain and a C-terminal HECT (homologous to E6-AP C-terminus) domain. The HECT domain is responsible for the ubiquitin ligase activity, catalyzing polyubiquitination. EULIR is ubiquitously expressed throughout early development and is important for the complete and proper closure of the neural tube. Mutations in the gene encoding EULIR can result in neural tube defects.

## REFERENCES

1. Wang, M., et al. 2005. Different HECT domain ubiquitin ligases employ distinct mechanisms of polyubiquitin chain synthesis. *EMBO J.* 24: 4324-4333.
2. Li, W., et al. 2005. Methods for the functional genomic analysis of ubiquitin ligases. *Meth. Enzymol.* 398: 280-291.
3. Kim, M., et al. 2006. Differential expression in histologically normal crypts of ulcerative colitis suggests primary crypt disorder. *Oncol. Rep.* 16: 663-670.
4. Kee, Y., et al. 2007. Regulation of catalytic activities of HECT ubiquitin ligases. *Biochem. Biophys. Res. Commun.* 354: 329-333.
5. Brooks, W.S., et al. 2007. G2E3 is a nucleocytoplasmic shuttling protein with DNA damage responsive localization. *Exp. Cell Res.* 313: 665-676.
6. Zohn, I.E., et al. 2007. The HECTD1 ubiquitin ligase is required for development of the head mesenchyme and neural tube closure. *Dev. Biol.* 306: 208-221.

## CHROMOSOMAL LOCATION

Genetic locus: HECTD1 (human) mapping to 14q12; Hectd1 (mouse) mapping to 12 C1.

## SOURCE

EULIR (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of EULIR of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

EULIR (H-300) is recommended for detection of EULIR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EULIR (H-300) is also recommended for detection of EULIR in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EULIR siRNA (h): sc-62284, EULIR siRNA (m): sc-62285, EULIR shRNA Plasmid (h): sc-62284-SH, EULIR shRNA Plasmid (m): sc-62285-SH, EULIR shRNA (h) Lentiviral Particles: sc-62284-V and EULIR shRNA (m) Lentiviral Particles: sc-62285-V.

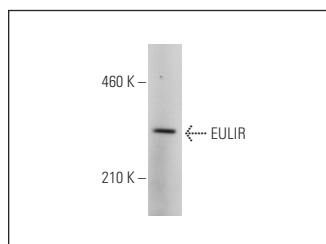
Molecular Weight of EULIR: 289 kDa.

Positive Controls: human brain hippocampus extract: sc-364375.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



EULIR (H-300): sc-134976. Western blot analysis of EULIR expression in human brain tissue extract.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **EULIR (1E10): sc-517169**, our highly recommended monoclonal alternative to EULIR (H-300).