

# NHLH2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54532

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession Q02577

**Reactivity** Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 15018
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human NHLH2

**Epitope Specificity** 1-50/135 **Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus

**SIMILARITY** Contains 1 bHLH (basic helix-loop-helix) domain.

**SUBUNIT** Efficient DNA binding requires dimerization with another bHLH protein. **Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** The helix-loop-helix (HLH) structures are known motifs commonly found in

membrane-active and DNA-binding proteins. The helix-loop-helix proteins HEN1 and HEN2 are DNA-binding proteins that may be involved in cell-type determination in the early nervous system. Studies of expression in normal tissues have demonstrated expression of NHLH1/NSCL-1 and NHLH2/NSCL-2, the genes encoding HEN1 and HEN2, in the developing central and peripheral

nervous system, specifically in developing neurons.

### **Additional Information**

**Gene ID** 4808

Other Names Helix-loop-helix protein 2, HEN-2, Class A basic helix-loop-helix protein 34,

bHLHa34, Nescient helix loop helix 2, NSCL-2, NHLH2, BHLHA34, HEN2,

**KIAA0490** 

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

#### **Protein Information**

Name NHLH2

Synonyms BHLHA34, HEN2, KIAA0490

**Function** Transcription factor which binds the E box motif 5'- CA[TC][AG]TG-3'.

Involved in regulating energy expenditure, body mass, voluntary physical activity, mating behavior and reproductive longevity, acting through the hypothalamic-pituitary-gonadal axis. Acts as a transcriptional activator of target genes, including NDN, PCSK1, MC4R (By similarity). Is also a

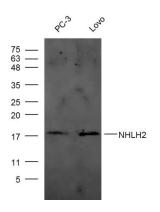
transcriptional activator of KISS1 (PubMed:35066646). May act centrally to regulate function of both white and brown adipose tissue. Together with NHLH1, required to maintain migration and survival of cells in the anterior extramural migration stream (aes), which forms the precerebellar nuclei. Also,

in concert with NHLH1, may determine fate of gonadotropin releasing

hormone-1 (GnRH-1) neurons.

**Cellular Location** Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00981}.

## **Images**



#### Sample:

PC-3 (human)cell Lysate at 40 ug Lovo (human)cell Lysate at 40 ug

Primary: Anti- NHLH2 (AP54532) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 15 kD Observed band size: 18 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.