

# **Rabbit Anti-PHC2 antibody**

# SL11291R

Product Name:	PHC2
Chinese Name:	早期发育调控蛋白2/HDC2抗体
Alias:	HDC2; Early development regulatory protein 2; hPH2; early development regulator 2 (homolog of polyhomeotic 2); early development regulator 2 like; EDR2; MGC163502; mph2; PHC2; PHC2_HUMAN; polyhomeotic 2; polyhomeotic like 2; Polyhomeotic-like protein 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	91kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HDC2/PHC2:651-750/858
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	In Drosophila melanogaster, the 'Polycomb' group (PcG) of genes are part of a cellular memory system that is responsible for the stable inheritance of gene activity. PcG proteins form a large multimeric, chromatin-associated protein complex. The protein encoded by this gene has homology to the Drosophila PcG protein polyhomeotic' (Ph)

and is known to heterodimerize with EDR1 and colocalize with BMI1 in interphase nuclei of human cells. The specific function in human cells has not yet been determined. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008].

## Function:

Component of the Polycomb group (PcG) multiprotein PRC1 complex, a complex required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility.

### Subunit:

Component of a PRC1-like complex. Interacts with CBX4. Interacts with BMI1, PCGF2, PHC1 and RNF2. Interacts with CHTOP (By similarity). Interacts with the N-terminal region of the SP1 transcription factor and with MAPKAPK2.

## Subcellular Location:

Nucleus.

## Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

## Similarity:

Contains 1 FCS-type zinc finger.

Contains 1 SAM (sterile alpha motif) domain.

### **SWISS:**

Q8IXK0

## Gene ID:

1912

## Database links:

Entrez Gene: 1912 Human

Entrez Gene: 54383 Mouse

Entrez Gene: 313038 Rat

GenBank: NP\_004418.2 Human

Omim: 602979 Human

SwissProt: Q8IXK0 Human

SwissProt: Q9QWH1 Mouse

Unigene: 524271 Human

Unigene: 259103 Mouse

Unigene: 2428 Rat

## Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.