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cad antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI12851

Product Information

Application	WB
Primary Accession	P09085
Other Accession	NM_134301, NP_599128
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45726

Additional Information

Gene ID	35341
Alias Symbol	Dmel_CG1759, 38E.19, CG1759, Cad, S67, cd, anon-WO2004063362.83, CAD, Dmel\CG1759
Other Names	Homeotic protein caudal, cad
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-cad antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	cad antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	cad
Function	Caudal (cad) is one of a number of transcription factors controlling segmentation of the embryo. Further transcriptional regulation via a 5' flanking region containing DNA replication-related elements (DRE) and by dref also regulated by trh and tgo via the CNS midline element. Alongside Bicoid (bcd), caudal forms concentration gradients down the anterior-posterior (A-P) axis providing positional information and subsequent induction of the gap genes. Plays a role in gastrulation/germ band extension, hindgut morphogenesis, positive regulation of cell proliferation, genital disk development and pattern formation. Acts as a key regulator of the Hox gene network and activates transcription via the downstream core promoter element (DPE) relative to the TATA box. Plays a role in the establishment of the hindgut and in the invagination of the hindgut primordium during

gastrulation. These effects on the gut are achieved by acting combinatorially at the posterior of the embryo to activate transcription of different targets including fog, fkh and wg. Caudal is involved in regulation of proliferation through transactivation of the E2F gene. Postembryonically its function is mostly restricted to the intestine where it regulates antimicrobial peptide (AMP) levels preserving the normal gut flora.

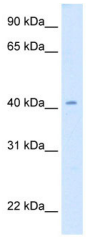
Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108, ECO:0000269|PubMed:2433048}

Tissue Location

Maternally localized in an anteroposterior gradient in the syncytial blastoderm. Also expressed in the pole cells Zygotically localized in the primordia of the terminal abdominal segment, the hindgut and in the posterior midgut rudiment. Expressed in the gut, the gonads and parts of the genital disks of third instar larvae (at protein level).

Images



WB Suggested Anti-cad Antibody Titration: 0.2-1 µg/ml
Positive Control: Drosophila

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