

# Retinoic Acid Directs Cardiac Laterality and the Expression of Asymmetry

Developmental Biology

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Homeodomain factor Nkx2-5 controls left/right asymmetric expression of bHLH gene eHand during murine heart development.. Genes and Development, 1997, 11, 1357-1369.	2.7	291
2	LEFT-RIGHT ASYMMETRY IN ANIMAL DEVELOPMENT. Annual Review of Cell and Developmental Biology, 1997, 13, 53-82.	4.0	62
3	Leftâ€”right asymmetry in vertebrates. Current Opinion in Genetics and Development, 1997, 7, 519-523.	1.5	35
4	Embryonic asymmetry: Left TGF $\beta$ 2 at the right time?. Current Biology, 1997, 7, R212-R215.	1.8	26
5	Knowing in your heart what's right. Trends in Cell Biology, 1997, 7, 447-453.	3.6	33
6	New Insights into Retinoid Signaling in Cardiac Development and Physiology. Trends in Cardiovascular Medicine, 1997, 7, 324-329.	2.3	23
7	Partial purification of HLAMP-1 provides direct evidence for the multicomponent nature of the particulate matrix associated with cardiac mesenchyme formation. Journal of Cellular Biochemistry, 1997, 66, 112-122.	1.2	16
8	Molecular mechanisms of vertebrate leftâ€”right development. Trends in Genetics, 1998, 14, 459-465.	2.9	130
9	Identification of the developmental marker, JB3-antigen, as fibrillin-2 and its de novo organization into embryonic microfibrillar arrays. Developmental Dynamics, 1998, 212, 461-471.	0.8	57
10	Role of vitamin A in the formation of congenital heart defects. , 1998, 253, 147-153.		23
11	Patterning the heart's left-right axis: From zebrafish to man. , 1998, 22, 278-287.		22
12	Left-right development from embryos to brains. Genesis, 1998, 23, 159-163.	3.1	25
13	Cardiac looping â€” an uneasy deal with laterality. Seminars in Cell and Developmental Biology, 1998, 9, 101-108.	2.3	42
14	Leftâ€”right asymmetry and the chick embryo. Seminars in Cell and Developmental Biology, 1998, 9, 67-76.	2.3	51
15	No turning,a Mouse Mutation Causing Leftâ€”Right and Axial Patterning Defects. Developmental Biology, 1998, 193, 77-89.	0.9	86
16	Murine Cerberus Homologue mCer-1: A Candidate Anterior Patterning Molecule. Developmental Biology, 1998, 194, 135-151.	0.9	171
17	Two rights make a wrong: human left-right malformations. Human Molecular Genetics, 1998, 7, 1565-1571.	1.4	116
18	Vitamin A and Embryonic Development: An Overview , Journal of Nutrition, 1998, 128, 455S-458S.	1.3	155

#	ARTICLE	IF	CITATIONS
19	Retinoids and Their Receptors in Vertebrate Embryogenesis. <i>Journal of Nutrition</i> , 1998, 128, 467S-470S.	1.3	61
20	Retinoids in Heart Development. , 1999, , 209-219.		9
21	Symmetry and Asymmetry in the Development of Inner Organs in Parabioc Twins of Amphibians (Urodela). <i>Laterality</i> , 1999, 4, 209-255.	0.5	0
22	Molecular basis of leftâ€“right asymmetry. <i>Development Growth and Differentiation</i> , 1999, 41, 645.	0.6	32
23	Multiple left-right asymmetry defects in Shh-/- mutant mice unveil a convergence of the Shh and retinoic acid pathways in the control of Lefty-1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 11376-11381.	3.3	248
24	Symmetry and Asymmetry in the Development of Inner Organs in Parabioc Twins of Amphibians (Urodela). <i>Laterality</i> , 1999, 4, 209-255.	0.5	1
25	The homeobox gene it NKX3.2 is a target of leftâ€“right signalling and is expressed on opposite sides in chick and mouse embryos. <i>Current Biology</i> , 1999, 9, 911-S1.	1.8	128
26	Cardiosensor Mice and Transcriptional Subdomains of the Vertebrate Heart. <i>Trends in Cardiovascular Medicine</i> , 1999, 9, 3-10.	2.3	26
27	Endocrine, immune, and behavioral effects of aldicarb (carbamate), atrazine (triazine) and nitrate (fertilizer) mixtures at groundwater concentrations. <i>Toxicology and Industrial Health</i> , 1999, 15, 133-151.	0.6	91
28	Characterization and Mutation Analysis of Human LEFTY A and LEFTY B, Homologues of Murine Genes Implicated in Left-Right Axis Development. <i>American Journal of Human Genetics</i> , 1999, 64, 712-721.	2.6	216
29	Early events of cardiovascular development. <i>Seminars in Fetal and Neonatal Medicine</i> , 1999, 4, 125-130.	2.8	0
30	Retinoic Acid Affects Leftâ€“Right Patterning. <i>Developmental Biology</i> , 1999, 215, 332-342.	0.9	42
31	Retinoic acid inhibition of cardiac mesenchyme formation in vitro correlates with changes in the secretion of particulate matrix from the myocardium. , 2000, 258, 186-197.		4
32	Knowing left from right: the molecular basis of laterality defects. <i>Trends in Molecular Medicine</i> , 2000, 6, 112-118.	2.6	19
33	Establishing a Left-Right Axis in the Embryo. <i>IUBMB Life</i> , 2000, 50, 1-11.	1.5	33
34	Distribution of fibrillin I in extracellular matrix and epithelia during early development of avian embryos. <i>Anatomy and Embryology</i> , 2000, 201, 317-326.	1.5	16
35	Moderate maternal vitamin A deficiency affects perinatal organ growth and development in rats. <i>British Journal of Nutrition</i> , 2000, 84, 125-132.	1.2	32
36	Retinoid-Enhanced Alveolization. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2000, 23, 137-141.	1.4	16

#	ARTICLE	IF	CITATIONS
37	Early Exclusion of Hand1-Deficient Cells from Distinct Regions of the Left Ventricular Myocardium in Chimeric Mouse Embryos. <i>Developmental Biology</i> , 2000, 227, 156-168.	0.9	55
38	Mechanisms of Left-Right Determination in Vertebrates. <i>Cell</i> , 2000, 101, 9-21.	13.5	299
39	Left-Right Asymmetry Determination in Vertebrates. <i>Annual Review of Cell and Developmental Biology</i> , 2001, 17, 779-805.	4.0	192
40	A Role for BMP Signalling in Heart Looping Morphogenesis in <i>Xenopus</i> . <i>Developmental Biology</i> , 2001, 232, 191-203.	0.9	71
41	Retinoic acid administration is associated with changes in the extracellular matrix and cardiac mesenchyme within the endocardial cushion. <i>The Anatomical Record</i> , 2001, 263, 53-61.	2.3	9
42	Directionality of Heart Looping: Effects of Pitx2c Misexpression on Flectin Asymmetry and Midline Structures. <i>Developmental Biology</i> , 2002, 246, 407-417.	0.9	40
43	Formation and Malformation of the Vertebrate Left-Right Axis. <i>Current Molecular Medicine</i> , 2002, 2, 39-66.	0.6	27
44	Retinoids and Cardiovascular Developmental Defects. <i>Cardiovascular Toxicology</i> , 2002, 2, 25-40.	1.1	29
45	Retinoic acid signalling centres in the avian embryo identified by sites of expression of synthesising and catabolising enzymes. <i>Developmental Dynamics</i> , 2003, 227, 114-127.	0.8	127
46	Effects of antisense misexpression of CFC on downstream flectin protein expression during heart looping. <i>Developmental Dynamics</i> , 2003, 228, 217-230.	0.8	34
47	Heart development: molecular insights into cardiac specification and early morphogenesis. <i>Developmental Biology</i> , 2003, 258, 1-19.	0.9	406
48	Codistribution analysis of elastin and related fibrillar proteins in early vertebrate development. <i>Matrix Biology</i> , 2003, 22, 109-121.	1.5	37
49	GENETICS OF HUMAN LATERALITY DISORDERS: Insights from Vertebrate Model Systems. <i>Annual Review of Genomics and Human Genetics</i> , 2003, 4, 1-32.	2.5	97
50	Teratogenicity of elevated egg incubation temperature and egg vitamin A status in Atlantic salmon, <i>Salmo salar</i> L.. <i>Journal of Fish Diseases</i> , 2004, 27, 213-223.	0.9	58
51	A Southpaw Joins the Roster: The Role of the Zebrafish nodal-related Gene Southpaw in Cardiac LR Asymmetry. <i>Trends in Cardiovascular Medicine</i> , 2004, 14, 43-49.	2.3	35
52	Popeye domain containing gene 2 (Popdc2) is a myocyte-specific differentiation marker during chick heart development. <i>Developmental Dynamics</i> , 2004, 229, 695-702.	0.8	29
53	Unveiling the establishment of left-right asymmetry in the chick embryo. <i>Mechanisms of Development</i> , 2004, 121, 1043-1054.	1.7	35
55	Moderate maternal vitamin A deficiency alters myogenic regulatory protein expression and perinatal organ growth in the rat. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2005, 288, R73-R79.	0.9	24

#	ARTICLE	IF	CITATIONS
56	Retinoic acid signaling acts via Hox1 to establish the posterior limit of the pharynx in the chordate amphioxus. <i>Development (Cambridge)</i> , 2005, 132, 61-73.	1.2	96
57	Leftâ€“right asymmetry in embryonic development: a comprehensive review. <i>Mechanisms of Development</i> , 2005, 122, 3-25.	1.7	426
58	Leftâ€“right asymmetry and congenital cardiac defects: Getting to the heart of the matter in vertebrate leftâ€“right axis determination. <i>Developmental Biology</i> , 2005, 288, 1-20.	0.9	181
59	Comparative analysis of mRNA and protein expression of Popdc1 (Bves) during early development in the chick embryo. <i>Developmental Dynamics</i> , 2006, 235, 691-700.	0.8	23
60	Fibrillins: From Biogenesis of Microfibrils to Signaling Functions. <i>Current Topics in Developmental Biology</i> , 2006, 75, 93-123.	1.0	93
61	Retinoic Acid and the Heart. <i>Vitamins and Hormones</i> , 2007, 75, 257-283.	0.7	80
62	Congenital and Acquired Heart Disease. , 2007, , 165-208.		0
63	A ryanodine receptor-dependent $\text{Ca}^{2+}$ asymmetry at Hensen's node mediates avian lateral identity. <i>Development (Cambridge)</i> , 2008, 135, 3271-3280.	1.2	21
64	The Expanding Role for Retinoid Signaling in Heart Development. <i>Scientific World Journal, The</i> , 2008, 8, 194-211.	0.8	28
65	Retinoids and Heart Development. , 2010, , 237-253.		1
66	Cardiac Leftâ€“Right Asymmetry. , 2010, , 281-296.		1
67	Environmentally Induced Heart Malformations. , 2010, , 429-446.		1
68	Retinoic Acid Signaling Sequentially Controls Visceral and Heart Laterality in Zebrafish. <i>Journal of Biological Chemistry</i> , 2011, 286, 28533-28543.	1.6	28
72	Mechanisms of retinoic acid signaling during cardiogenesis. <i>Mechanisms of Development</i> , 2017, 143, 9-19.	1.7	74
73	Expression of hLAMP-1-Positive Particles During Early Heart Development in the Chick. <i>Journal of Veterinary Medicine Series C: Anatomia Histologia Embryologia</i> , 2017, 46, 413-422.	0.3	0
74	Disruption of Nuclear Receptor Signaling Alters Triphenyl Phosphate-Induced Cardiotoxicity in Zebrafish Embryos. <i>Toxicological Sciences</i> , 2018, 163, 307-318.	1.4	53
75	Overview of Heart Development. , 2001, , 1-22.		4
76	Morphoregulatory Mechanisms Underlying Early Heart Development: Precardiac Stages to the Looping, Tubular Heart. , 1998, , 1-41.		9

#	ARTICLE	IF	CITATIONS
77	Avian Embryo as Model for Retinoid Function in Early Development. Handbook of Experimental Pharmacology, 1999, , 443-464.	0.9	6
78	Cardiac Fate Maps. , 1999, , 3-18.		20
79	Transcriptional Control and Pattern Formation in the Developing Vertebrate Heart. , 1999, , 111-129.		16
80	Mechanisms of Segmentation, Septation, and Remodeling of the Tubular Heart. , 1999, , 159-177.		46
81	Regionalization of Transcriptional Potential in the Myocardium. , 1999, , 333-355.		15
82	Establishing Cardiac Left-Right Asymmetry. , 1999, , 373-389.		5
83	Left-Right Asymmetry and Cardiac Looping. , 1999, , 391-402.		5
84	Molecular Determinants of Cardiac Development and Congenital Disease. , 2002, , 331-370.		8
85	The compulsion of chirality: toward an understanding of left-right Asymmetry. Genes and Development, 1998, 12, 763-769.	2.7	103
86	Retinoic acid is required in the mouse embryo for left-right asymmetry determination and heart morphogenesis. Development (Cambridge), 1999, 126, 2589-2596.	1.2	115
87	Cardiac looping and the vertebrate left-right axis: antagonism of left-sided Vg1 activity by a right-sided ALK2-dependent BMP pathway. Development (Cambridge), 1999, 126, 5195-5205.	1.2	61
88	Differential expression and functional analysis of <i>Pitx2</i> isoforms in regulation of heart looping in the chick. Development (Cambridge), 2001, 128, 1005-1013.	1.2	71
89	Elevated transforming growth factor $\beta$ 2 enhances apoptosis and contributes to abnormal outflow tract and aortic sac development in retinoic X receptor $\beta$ knockout embryos. Development (Cambridge), 2002, 129, 733-746.	1.2	61
92	Elevated transforming growth factor beta2 enhances apoptosis and contributes to abnormal outflow tract and aortic sac development in retinoic X receptor alpha knockout embryos. Development (Cambridge), 2002, 129, 733-46.	1.2	28