RT² Profiler PCR Array (Rotor-Gene® Format)

Pig WNT Signaling Targets

Cat. no. 330231 PASS-243ZR

For pathway expression analysis

Format	For use with the following real-time cyclers
RT² Profiler PCR Array, Format R	Rotor-Gene Q, other Rotor-Gene cyclers

Description

The Pig WNT Signaling Targets RT² Profiler PCR Array profiles the expression of 84 key genes responsive to WNT signal transduction. The WNT family of secreted growth factors regulates development and differentiation as well as general cell maintenance processes such as migration and cell cycle regulation. The WNT ligands bind to Frizzled (FZD) receptor family members and activate one of three WNT pathways: the canonical pathway, planar cell polarity (PCP), and a calcium ion-dependent pathway. The well-studied and better characterized canonical WNT pathway signals through

For further details, consult the *RT² Profiler PCR Array Handbook*.

Shipping and storage

RT² Profiler PCR Arrays in the Rotor-Gene format are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products.

For long term storage, keep plates at –20°C.

Note: Ensure that you have the correct RT² Profiler PCR Array format for your real-time cycler (see table above).

Note: Open the package and store the products appropriately immediately on receipt.

Array layout

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc™ (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance.

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Ssc.8764	XM_003130205	ABCB1	ATP-binding cassette, sub-family B (MDR/TAP), member 1
A02	Ssc.23792	XM_003130189	AHR	Aryl hydrocarbon receptor
A03	Ssc.17345	NM_001038644	ANGPTL4	Angiopoietin-like 4
A04	Ssc.73940	XM_003125066	ANTXR1	Anthrax toxin receptor 1
A05	N/A	XM_001926560	APCDD1L	Adenomatosis polyposis coli down-regulated 1-like
A06	Ssc.16326	NM_001164004	BGLAP	Bone gamma-carboxyglutamate (gla) protein
A07	Ssc.432	NM_214141	BIRC5	Baculoviral IAP repeat containing 5
A08	Ssc.16690	NM_001101031	BMP4	Bone morphogenetic protein 4
A09	Ssc.50003	XM_001924828	BTRC	Beta-transducin repeat containing
A10	N/A	XM_003358478	CACNA2D3	Calcium channel, voltage-dependent, alpha 2/delta subunit 3
A11	Ssc.70001	NM_213833	CCN2	Connective tissue growth factor
A12	Ssc.79862	NM_214088	CCND2	Cyclin D2
B01	Ssc.7538	NM_001163060	CDH1	Cadherin 1, type 1, E-cadherin (epithelial)
B02	Ssc.2807	XM_003133906	DAB2	Disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila)
B03	Ssc.7524	NM_001145384	DKK1	Dickkopf homolog 1 (Xenopus laevis)
B04	Ssc.33306	NM_001048187	DLK1	Delta-like 1 homolog (Drosophila)
B05	Ssc.80328	XM_001925636	DPP10	Dipeptidyl-peptidase 10 (non-functional)
B06	Ssc.54725	NM_214007	EGFR	Epidermal growth factor receptor
B07	Ssc.81346	XM_003123974	EGR1	Early growth response 1
B08	Ssc.5142	XM_003125509	ENPP2	Ectonucleotide pyrophosphatase/phosphodiesterase 2
B09	N/A	XM_003134196	FGF20	Fibroblast growth factor 20
B10	Ssc.15923	XM_003353365	FGF7	Fibroblast growth factor 7
B11	Ssc.214	NM_213801	FGF9	Fibroblast growth factor 9 (glia-activating factor)
B12	Ssc.16743	XM_003133641	FN1	Fibronectin 1
C01	Ssc.4747	NM_001003662	FST	Follistatin
C02	N/A	NM_001244297	GDF5	Growth differentiation factor 5
C03	Ssc.76350	XM_003133897	GDNF	Glial cell derived neurotrophic factor
C04	Ssc.1357	NM_001244212	GJA1	Gap junction protein, alpha 1, 43kDa
C05	Ssc.777	NM_214248	HSD11B1	Hydroxysteroid (11-beta) dehydrogenase 1
C06	Ssc.14914	NM_001037965	ID2	Inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
C07	Ssc.16231	NM_214256	IGF1	Insulin-like growth factor 1 (somatomedin C)
C08	Ssc.9365	NM_213883	IGF2	Insulin-like growth factor 2 (somatomedin A)
C09	Ssc.62	NM_214399	IL6	Interleukin 6 (interferon, beta 2)
C10	Ssc.658	NM_213867	IL8	Interleukin 8
C11	Ssc.70308	NM_001244489	IRS1	Insulin receptor substrate 1
C12	Ssc.8466	XM_001926559	JAG1	Jagged 1
D01	Ssc.33759	NM_001097489	KLF5	Kruppel-like factor 5 (intestinal)
D02	Ssc.14025	NM_001129967	LEF1	Lymphoid enhancer-binding factor 1
D03	Ssc.10025	XM_001925928	LOC100153946	CCAAT/enhancer-binding protein delta-like
D04	Ssc.6163	XM_001928469	LOC100154449	V-ets erythroblastosis virus E26 oncogene homolog 2
D05	Ssc.46284	XM_003133595	LOC100513691	Frizzled-7-like
D06	N/A	XM_003129319	LOC100515497	Protein atonal homolog 1-like
D07	Ssc.17121	XM_003130192	LOC100516456	Twist-related protein 1-like
D08	N/A	XM_003122418	LOC100518595	Fibroblast growth factor 4-like
D09	N/A	XM_003360352	LOC100518887	Ectodysplasin-A-like
D10	Ssc.10351	XM_003127198	LOC100521017	Urokinase plasminogen activator surface receptor-like
D11	Ssc.25551	XM_003357738	LOC100521743	Cubilin-like
			LOC100522	

Position	UniGene	GenBank	Symbol	Description
D12	Ssc.44667	XM_003134452	769	WNT1-inducible-signaling pathway protein 2-like
E01	Ssc.3391	XM_003122519	LOC100525205	Fos-related antigen 1-like
E02	N/A	XM_003360350	LOC100624619	Ephrin-B1-like
E03	N/A	XM_003361297	LOC100627044	WNT1-inducible-signaling pathway protein 1-like
E04	N/A	XM_003358479	LOC100627056	Protein Wnt-5a-like
E05	N/A	XM_003482962	LOC100739604	Axin-2-like
E06	N/A	XR_135211	LRP1	Low density lipoprotein receptor-related protein 1
E07	Ssc.42717	NM_001038008	MET	Met proto-oncogene (hepatocyte growth factor receptor)
E08	Ssc.5713	NM_214192	MMP2	Matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase)
E09	Ssc.548	NM_214207	MMP7	Matrix metallopeptidase 7 (matrilysin, uterine)
E10	Ssc.4086	NM_001038004	MMP9	Matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)
E11	Ssc.21433	NM_001005154	MYC	V-myc myelocytomatosis viral oncogene homolog (avian)
E12	Ssc.42681	NM_001129971	NANOG	Nanog homeobox
F01	Ssc.92795	XM_003130271	NRCAM	Neuronal cell adhesion molecule
F02	Ssc.28134	XM_003130798	NRP1	Neuropilin 1
F03	Ssc.54461	XM_003130647	NTRK2	Neurotrophic tyrosine kinase, receptor, type 2
F04	Ssc.23994	NM_214321	PGHS-2	Prostaglandin G/H synthase-2
F05	Ssc.6994	NM_001206435	PITX2	Paired-like homeodomain 2
F06	Ssc.29069	NM_001113060	POU5F1	POU class 5 homeobox 1
F07	Ssc.15972	NM_001130241	PPARD	Peroxisome proliferator-activated receptor delta
F08	N/A	XM_003357699	PTCH1	Patched 1
F09	Ssc.42109	XM_001924443	RUNX2	Runt-related transcription factor 2
F10	Ssc.71497	NM_001114673	SALL4	Sal-like 4 (Drosophila)
F11	Ssc.3232	NM_001244395	SFRP2	Secreted frizzled-related protein 2
F12	Ssc.15233	NM_001199718	SIX1	SIX homeobox 1
G01	Ssc.64432	XM_003134680	SMO	Smoothened, frizzled family receptor
G02	Ssc.42849	NM_001123197	SOX2	SRY (sex determining region Y)-box 2
G03	Ssc.16373	NM_213843	SOX9	SRY (sex determining region Y)-box 9
G04	Ssc.16174	XM_001928144	T	T, brachyury homolog (mouse)
G05	Ssc.40606	XM_003480332	TCF4	Transcription factor 4
G06	Ssc.2301	XM_003124969	TCF7L1	Transcription factor 7-like 1 (T-cell specific, HMG-box)
G07	Ssc.19409	XM_001928695	TCF7L2	Transcription factor 7-like 2 (T-cell specific, HMG-box)
G08	Ssc.27593	NM_214198	TGFB3	Transforming growth factor, beta 3
G09	Ssc.18454	XM_003121973	TLE1	Transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila)
G10	Ssc.5663	NM_001206429	VCAN	Versican
G11	Ssc.57541	NM_214084	VEGFA	Vascular endothelial growth factor A
G12	Ssc.49277	XM_003123611	WNT9A	Wingless-type MMTV integration site family, member 9A
H01	Ssc.10316	XM_003357928	ACTB	Actin, beta
H02	Ssc.73773	NM_213978	B2M	Beta-2-microglobulin
H03	Ssc.16135	NM_001206359	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Ssc.4158	NM_001032376	HPRT1	Hypoxanthine phosphoribosyltransferase 1
H05	Ssc.27927	XM_003127305	RPL13A	Ribosomal protein L13a
H06	N/A	SA_00133	SGDC	Pig Genomic DNA Contamination
H07	N/A	SA_00104	RTC	Reverse Transcription Control
H08	N/A	SA_00104	RTC	Reverse Transcription Control
H09	N/A	SA_00104	RTC	Reverse Transcription Control
H10	N/A	SA_00103	PPC	Positive PCR Control
H11	N/A	SA_00103	PPC	Positive PCR Control
H12	N/A	SA_00103	PPC	Positive PCR Control

Related products

For optimal performance, RT² Profiler PCR Arrays should be used together with the RT² First Strand Kit for cDNA synthesis and RT² SYBR® Green qPCR Mastermixes for PCR.

Product	Contents	Cat. no.
RT² First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT² SYBR Green ROX™ FAST Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the Rotor-Gene Q and other Rotor-Gene cyclers	330620

* Larger kit sizes available; please inquire.

RT² Profiler PCR Array products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

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