

Antibody	Supplier	Fixation	Antigen retrieval	Antibody concentration
HNF4 $\alpha$ (H-171) (Rabbit)	SC-8987 - Santa Cruz	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
Vimentin (Mouse)	M0725 - Dako	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
Oct4 (Rabbit)	ab19857 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/200
Nanog (Goat)	AF1997 - R&D Systems	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/200
FoxA2 (Rabbit)	ab23630 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/200
CYP 3A (Sheep)	Gift from R. Wolfe, University of Dundee	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/400
Sox17 (Goat)	AF1924 - R&D Systems	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/200
E-cadherin (Mouse)	ab1416 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/200
Ki67 (Rabbit)	ab16667 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/200
ZO1 (H-300) (Rabbit)	SC-10804 - Santa Cruz	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
ALB (Mouse)	ab10241 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/200
SULT1A1 (Mouse)	ab124011 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
SULT2A1 (Rabbit)	ab38416 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
MRP1 (Mouse)	ab24102 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
ABCB11 (Rabbit)	AF2727 - R&D Systems	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
AFP (Mouse)	ab75705 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
PROX1 (Goat)	ab155421 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100
A1AT (Mouse)	ab9399 - Abcam	Frozen, MeOH	Heat mediated Tris EDTA (pH9)	1/100

**Supplementary table 1: List of antibodies and optimised dilutions**

Antibody	Fluorophore	Supplier	Antibody concentration
Anti mouse IgG (H+L) (Donkey)	AlexaFluor 488	A21202 - Thermo Fisher Scientific	1/400
Anti-Rabbit IgG (H+L) (Goat )	AlexaFluor 568	A11011 - Thermo Fisher Scientific	1/400
Anti-goat IgG (H+L) (Donkey)	AlexaFluor 568	A11057 - Thermo Fisher Scientific	1/400
Anti-sheep IgG (H+L) (Donkey)	AlexaFluor 568	A21099 - Thermo Fisher Scientific	1/400

**Supplementary table 2: List of antibodies and optimised dilutions**

<b>Gene</b>	<b>Code</b>	<b>Supplier</b>
<i>GAPDH</i>	Hs02758991_g1	Applied Biosystems
<i>POU5F1 (Oct4)</i>	Hs00742896_s1	Applied Biosystems
<i>Nanog</i>	Hs02387400_g1	Applied Biosystems
<i>SOX17</i>	Hs00751752_s1	Applied Biosystems
<i>FOXA2</i>	Hs00232764_m1	Applied Biosystems
<i>HNF4a</i>	Hs01023298_m1	Applied Biosystems
<i>ALB</i>	Hs00910225_m1	Applied Biosystems
<i>AFP</i>	Hs01040607_m1	Applied Biosystems

**Supplementary table 3: List of qPCR primers**