



ParagonDx, a leader in molecular testing diagnostics, has developed a collection of human genomic DNA reference controls as a source of control materials for laboratories. All of the ParagonDx controls are characterized thoroughly with the appropriate functional testing, purity and integrity checks.

PRICING: \$50 EACH, EXCEPT CONTROLS HIGHLIGHTED IN DARK BLUE ARE \$100 EACH.

Minimum Order \$250

CYP2D6 Controls. For Research Use Only. Not for use in diagnostic procedures. Patent Pending.

CATALOG NO.	GENE / CONTROL	DEFINING MUTATIONS
001-04102X	CYP2D6 *4A/*2AxN	*4 (1846G>A); *10 (100C>T); *2AxN (CYP450 Gene Duplication, -1584C>G, 2850C>T)
001-000217	CYP2D6 *2M/*17	*2M (-1584C, 2850C>T); *17 (1023C>T)
001-00292X	CYP2D6 *29/*2AxN	*29 (1659G>A, 3183G>A); *2AxN (CYP450 Gene Duplication, -1584C>G, 2850C>T)
001-000641	CYP2D6 *6B/*41	*6 (1707T>del); *41 (2988G>A)
001-000105	CYP2D6 *1/*5	*5 (CYP2D6 gene deletion)
001-030410	CYP2D6 *3A/*4A	*3 (2549A>del); *4 (1846G>A); *10 (100C>T)

Human Genomic Quality Controls.

For Research Use Only. Not for use in diagnostic procedures. Patent Pending.

001-003541	CYP2D6 *35/*41	*35 (31G>A); *41 (2988G>A)
001-000109	CYP2D6 *1/*9	*9 (2613-2615delAGA)
001-000106	CYP2D6 *1/*6B	*6 (1707T>del)
001-000541	CYP2D6 *5/*41	*5 (CYP2D6 gene deletion); *41 (2988G>A)
001-000505	CYP2D6 *5/*5	*5 (CYP2D6 gene deletion)
001-000101	CYP2D6 *1A/*1A	None (Lacks polymorphic sites)
001-000407	CYP2D6 *4A/*7	*4 (1846G>A); *7 (2935A>C)
001-000517	CYP2D6 *5/*17	*5 (CYP2D6 gene deletion), *17 (1023C>T)
001-00044X	CYP2D6 *4/*4xN	*4 (1846G>A); *4xN (CYP450 Gene Duplication, -1846G>A)
001-00011X	CYP2D6 *1/*1xN	*1xN (CYP450 Gene Duplication, lacks polymorphic sites)
001-002A2A	CYP2D6 *2A/*2A	*2A (-1584C>G, 2850C>T)
001-00012A	CYP2D6 *1/*2A	*2A (-1584C>G, 2850C>T)
001-001010	CYP2D6 *10B/*10B	*10 (100C>T)
002-000101	CYP2C19 *1/*1	None (Lacks polymorphic sites characteristic of CYP2C19 *2, *3, *4, *5, *6, *7, *8, *10, *17)
002-000102	CYP2C19 *1/*2	*2 [+19154 G>A (+681 G>A)]
002-000103	CYP2C19 *1/*3	*3 [+17948 G>A (+636 G>A)]
002-000117	CYP2C19 *1/*17	*17 (-3402 C>T, -806 C>T)

CATALOG NO.	GENE / CONTROL	DEFINING MUTATIONS
002-001717	CYP2C19 *17/*17	*17 (-3402 C>T, -806 C>T)
002-000217	CYP2C19 *2/*17	*2 [+19154 G>A (+681 G>A)], *17 (-3402 C>T, -806 C>T)
003-000101	CYP2C9 *1/*1	None (Lacks polymorphic sites characteristic of CYP2C9 *2, *3, *4, *5, *6, *8, *9, *10, *11, *12, *13, *15, *25)
003-000103	CYP2C9 *1/*3	*3 (+42614 A>C)
009-0203CT	CYP2C9 *2/*3, VKORC1 +1173CT	*2 (+3608 C>T); *3 (+42614 A>C), VKORC1 (+1173 C>T)
003-000202	CYP2C9 *2A/*2A	CYP2C9 Control - Homozygous for *2
003-000102	CYP2C9 *1/*2	*2 (+3608 C>T)
003-000303	CYP2C9 *3/*3	*3 (+42614 A>C)
004-GGCCAA	VKORC1 (-1639GG / +1173CC / +3730AA)	VKORC1 (-1639G>A; 1173C>T; 3730G>A)
004-GGCCGA	VKORC1 (-1639GG / +1173CC / +3730GA)	VKORC1 (-1639G>A; 1173C>T; 3730G>A)
004-GGCCGG	VKORC1 (-1639GG / +1173CC / +3730GG)	VKORC1 (-1639G>A; 1173C>T; 3730G>A)
004-GACTGG	VKORC1 (-1639GA / +1173CT / +3730GG)	VKORC1 (-1639G>A; 1173C>T; 3730G>A)
004-AATTGG	VKORC1 (-1639AA / +1173TT / +3730GG)	VKORC1 (-1639G>A; 1173C>T; 3730G>A)
004-GACTGA	VKORC1 (-1639GA / +1173CT / +3730GA)	VKORC1 (-1639G>A; 1173C>T; 3730G>A)
005-000101	UGT1A1 *1/*1	*1 (6 TA repeats)
005-000137	UGT1A1 *1/*37	*1 (6 TA repeats); *37 (8 TA repeats)
005-002828	UGT1A1 *28/*28	*28 (7 TA repeats)
005-002836	UGT1A1 *28/*36	*28 (7 TA repeats); *36 (5 TA repeats)
005-000128	UGT1A1 *1/*28	*1 (6 TA repeats); *28 (7 TA repeats)
007-CCAA	MTHFR (+677CC/+1298AA)	MTHFR (+677 C>T/+1298 A>C)
007-CCAC	MTHFR (+677CC/+1298AC)	MTHFR (+677 C>T/+1298 A>C)
007-CCCC	MTHFR (+677CC/+1298CC)	MTHFR (+677 C>T/+1298 A>C)
007-CTAA	MTHFR (+677CT/+1298AA)	MTHFR (+677 C>T/+1298 A>C)
007-CTAC	MTHFR (+677CT/+1298AC)	MTHFR (+677 C>T/+1298 A>C)
007-TTAA	MTHFR (+677TT/+1298AA)	MTHFR (+677 C>T/+1298 A>C)
008-00045C	NAT2 *4/*5C	NAT2 *4 (wt); *5C (341 T>C)
008-000514	NAT2 *5/*14	NAT2 *5 (341 T>C); *14 (191 G>A)
008-005B6A	NAT2 *5B/*6A	NAT2 *5B (341 T>C); *6A (590 G>A)
008-005B5B	NAT2 *5B/*5B	NAT2 *5B (341 T>C)
008-00047B	NAT2 *4/*7B	NAT2 *4 (wt); *7B (857 G>A)
008-006A6A	NAT2 *6A/*6A	NAT2 *6A (590 G>A)
008-006A13	NAT2 *6A/*13	NAT2 *6A (590 G>A); *13 (282 C>T)
008-000413	NAT2 *4/*13	NAT2 *4 (wt); *13 (282 C>T)



ParagonDx controls offer:

- A consistent supply of well-characterized, relevant polymorphisms
- Genomic DNA that is derived from properly-consented individual donor samples
- Assurance that defining mutations are represented based on bi-directional sequence verification and appropriate PCR testing
- Compatibility with a variety of detection systems
- **Vials containing 200µl at a concentration of 50ng/µl for a total of 10,000ng (10µg) of DNA**

Warfarin Triple-Het Control Price \$100

CATALOG NO.	GENE / CONTROL	DEFINING MUTATIONS
009-0203CT	CYP2C9 *2/*3, VKORC1 +1173CT	*2 (+3608 C>T); *3 (+42614 A>C), VKORC1 (+1173 C>T)

This ParagonDx triple-het control offers:

- A single control for testing the most common polymorphisms associated with warfarin sensitivity testing
- Genomic DNA that is derived from properly-consented individual donor samples
- Assurance that defining mutations are represented based on bi-directional sequence verification and appropriate PCR testing
- Compatibility with a variety of detection systems
- **Vials containing 200µl at a concentration of 50ng/µl for a total of 10,000ng (10µg) of DNA**

No Template Control

LIST PRICE: \$20.00 each

CATALOG NO.	GENE / CONTROL	DEFINING MUTATIONS
000-NTC-100	N/A	N/A

ParagonDx No Template Controls offer:

- Assurance that each lot is QC tested to verify the absence of any contaminating DNA
- Compatibility with a variety of detection systems
- **Vials containing 200µl**



Reference Control Panels

ParagonDx reference control panels provide a way to obtain comprehensive allelic coverage for the genes of interest. Each panel includes a vial of ParagonDx No Template Control, which can be used to ensure that assay reagents are not contaminated with extraneous DNA.

PANELS	CATALOG NO.	GENE
PANEL NO. 1		LIST PRICE: \$300.00
<i>(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)</i>		
006-CYP2D6-1	001-04102X	CYP2D6 *4A/*2AxN
	001-00292X	CYP2D6 *29/*2AxN
	001-000641	CYP2D6 *6B/*41
	001-000105	CYP2D6 *1/*5
	001-030410	CYP2D6 *3A/*4A
	001-000217	CYP2D6 *2M/*17
	000-NTC-100	No Template Control
PANEL NO. 2		LIST PRICE: \$750.00
<i>(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)</i>		
006-CYP2D6-2	001-003541	CYP2D6 *35/*41
	001-000109	CYP2D6 *1/*9
	001-000106	CYP2D6 *1/*6B
	001-000541	CYP2D6 *5/*41
	001-000505	CYP2D6 *5/*5
	001-000101	CYP2D6 *1/*1
	001-00407	CYP2D6 *4A/*7
	001-000517	CYP2D6 *5/*17
	001-00044x	CYP2D6 *4/*4xN
	001-00011X	CYP2D6 *1/*1xN
	001-002A2A	CYP2D6 *2A/*2A
	001-00012A	CYP2D6 *1/*2A
	001-001010	CYP2D6 *10B/*10B
	000-NTC-100	No Template Control

PANEL NO. 3

(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)

LIST PRICE: \$800.00

006-CYP2C9VKORC1

This panel of controls covers all of the common allelic combinations:

	WT	HET	MUT
CYP2C9 *2	●	●	●
CYP2C9 *3	●	●	●
VKORC1 +1173	●	●	●

003-000101	CYP2C9 *1/*1 (2 vials)
003-000103	CYP2C9 *1/*3
003-000303	CYP2C9 *3/*3
003-000202	CYP2C9 *2/*2
003-000102	CYP2C9 *1/*2
009-0203CT	CYP2C9 *2/*3 and VKORC1 (-1639GA/+1173CT/+3730GG) (2 vials)
004-GACTGA	VKORC1 (-1639GA / +1173CT / +3730GA)
004-GGCCGG	VKORC1 (-1639GG / +1173CC / +3730 GG)
004-AATTGG	VKORC1 (-1639AA / +1173TT / +3730GG)
004-GGCCAA	VKORC1 (-1639GG / +1173CC / +3730 AA)
004-GGCCGA	VKORC1 (-1639GG / +1173CC / +3730 GA)
000-NTC-100	No Template Control

PANEL NO. 4

(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)

LIST PRICE: \$350.00

006-CYP2C9-1

003-000101	CYP2C9 *1/*1
003-000103	CYP2C9 *1/*3
003-000203	CYP2C9 *2/*3
003-000202	CYP2C9 *2/*2
003-000102	CYP2C9 *1/*2
003-000303	CYP2C9 *3/*3
000-NTC-100	No Template Control

PANEL NO. 5

(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)

LIST PRICE: \$300.00

006-CYP2C19-1

002-000101	CYP2C19 *1/*1
002-000102	CYP2C19 *1/*2
002-000103	CYP2C19 *1/*3
002-000117	CYP2C19 *1/*17
002-001717	CYP2C19 *17/*17
002-000217	CYP2C19 *2/*17
000-NTC-100	No Template Control

PANEL NO. 6

(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)

LIST PRICE: \$250.00

006-UGT1A1

005-000101	UGT1A1 *1/*1
005-000137	UGT1A1 *1/*37
005-002828	UGT1A1 *28/*28
005-002836	UGT1A1 *28/*36
005-000128	UGT1A1 *1/*28
000-NTC-100	No Template Control

PANEL NO. 7

LIST PRICE: \$300.00

(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)

006-MTHFR	007-CCAA	MTHFR (+677CC/+1298AA)
	007-CCAC	MTHFR (+677CC/+1298AC)
	007-CCCC	MTHFR (+677CC/+1298CC)
	007-CTAA	MTHFR (+677CT/+1298AA)
	007-CTAC	MTHFR (+677CT/+1298AC)
	007-TTAA	MTHFR (+677TT/+1298AA)
	000-NTC-100	No Template Control

PANEL NO. 8

LIST PRICE: \$400.00

(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)

006-NAT2	008-00045C	NAT2 *4/*5C
	008-000514	NAT2 *5/*14
	008-005B6A	NAT2 *5B/*6A
	008-005B5B	NAT2 *5B/*5B
	008-00047B	NAT2 *4/*7B
	008-006A6A	NAT2 *6A/*6A
	008-006A13	NAT2 *6A/*13
	008-000413	NAT2 *4/*13
	000-NTC-100	No Template Control

PANEL NO. 9

LIST PRICE: \$450.00

(For Research Use Only. Not for use in diagnostic procedures. Patent Pending.)

006-CUSTOM-1 Create your own panel by choosing any 5 reference controls	Any Control	Any reference control
	Any Control	Any reference control
	Any Control	Any reference control
	Any Control	Any reference control
	Any Control	Any reference control
	000-NTC-100	No Template Control

ParagonDx is a registered trademark of ParagonDx, LLC.

