



**PUREGENE DNA Isolation Kit Reagent Volumes For Whole Blood Or Bone Marrow Samples  
(0.05 ml to 10 ml or 0.35 to 70 Million Cells)**

<b>Blood or Bone Marrow Volume (ml)</b>	0.05	0.10	0.20	0.30	0.40	0.50	1.00	2.00	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
<b>Number of White Cells (Million)<sup>1)</sup></b>	0.35	0.70	1.40	2.10	2.80	3.50	7.00	14.00	21.0	28.0	35.0	42.0	49.0	56.0	63.0	70.0
<b>RBC Lysis Solution (ml)</b>	0.15	0.30	0.60	0.90	1.20	1.50	3.00	6.00	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0
<b>Cell Lysis Solution (ml)</b>	0.05	0.10	0.20	0.30	0.40	0.50	1.00	2.00	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
<b>Rnase A (µl)</b>	0.25	0.50	1.00	1.50	2.00	2.50	5.00	10.00	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
<b>Protein Precipitation Solution (ml)</b>	0.017	0.033	0.067	0.100	0.133	0.167	0.333	0.667	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.3
<b>100% Isopropanol (ml)</b>	0.05	0.10	0.20	0.30	0.40	0.50	1.00	2.00	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
<b>70% Ethanol (ml)</b>	0.05	0.10	0.20	0.30	0.40	0.50	1.00	2.00	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
<b>DNA Hydration Solution (µl)<sup>3)</sup></b>	4.2	8.3	16.7	25.0	33.3	41.7	83.3	166.7	250	333	417	500	583	667	750	833
<b>Theoretical DNA Yield (µg)<sup>4)</sup></b>	1.7	3.4	6.7	10.1	13.4	16.8	33.6	67.2	101	134	168	202	235	269	302	336

1) Cell number estimates assume an average of seven million white cells per ml of whole blood.

**PUREGENE DNA Isolation Kit Reagent Volumes For Cultured Cells (100 Cells to 500 Million Cells)**

<b>Number of Cultured Cells<sup>2)</sup></b>	10 <sup>2</sup> ~10 <sup>4</sup>	10 <sup>4</sup> ~10 <sup>5</sup>	0.5~1 x10 <sup>6</sup>	1~2x10 <sup>6</sup>	3~5x10 <sup>6</sup>	10x10 <sup>6</sup>	15x10 <sup>6</sup>	20x10 <sup>6</sup>	30~50 x10 <sup>6</sup>	100x10 <sup>6</sup>	500x10 <sup>6</sup>
<b>Tube Size (ml)</b>	1.5	1.5	1.5	1.5	1.5	15	15	15	15	50	250
<b>Cell Lysis Solution (ml)</b>	0.06	0.10	0.15	0.30	0.60	1.5	2.3	3.0	6.0	15.0	75.0
<b>Rnase A (µl)</b>	0.30	0.50	0.75	1.50	3.00	7.5	11.3	15.0	30.0	75.0	375.0
<b>Protein Precipitation Solution (ml)</b>	0.020	0.033	0.05	0.10	0.20	0.50	0.75	1.0	2.0	5.0	25.0
<b>100% Isopropanol (ml)</b>	0.06	0.10	0.15	0.30	0.60	1.5	2.3	3.0	6.0	15.0	75.0
<b>70% Ethanol (ml)</b>	0.06	0.10	0.15	0.30	0.60	1.5	2.3	3.0	6.0	15.0	75.0
<b>DNA Hydration Solution (µl)<sup>3)</sup></b>	10.0	10.0	10.0	20.0	60.0	125	200	250	500	1000	5000
<b>Theoretical DNA Yield (µg)<sup>4)</sup></b>	0.0004 ~0.04	0.04 ~0.4	2~6	5~10	15~30	50	75	100	80~300	500	2500

2) The number of cells in a tissue culture sample may be determined by counting with a hemacytometer.

3) Hydration Solution volume gives a DNA concentration of approximately 400 µg/ml.

4) DNA yield assumes 6 pg DNA per diploid nucleus and 80% recovery.

**PUREGENE DNA Isolation Kit Reagent Volumes For Solid Tissue (0.5 mg to 700 mg Solid Tissue)**

<b>Amount Tissue (mg)</b>	0.5~2.0	2.0~5.0	5~10	10~20	25	50	100	100~200	300~600	600~700
<b>Tube Size (ml)</b>	1.5	1.5	1.5	1.5	2.0	15	15	15	50	50
<b>Cell Lysis Solution (ml)</b>	0.10	0.15	0.30	0.60	0.75	1.5	3.0	6.0	18.0	21.0
<b>Rnase A (µl)</b>	0.50	0.75	1.50	3.00	3.75	7.5	15.0	30.0	90.0	105.0
<b>Protein Precipitation Solution (ml)</b>	0.033	0.050	0.10	0.20	0.25	0.50	1.00	2.0	6.0	7.0
<b>100% Isopropanol (ml)</b>	0.10	0.15	0.30	0.60	0.75	1.5	3.0	6.0	18.0	21.0
<b>70% Ethanol (ml)</b>	0.10	0.15	0.30	0.60	0.75	1.5	3.0	6.0	18.0	21.0
<b>DNA Hydration Solution (µl)</b>	10.0	25.0	50.0	100.0	150.0	200	375	425	500	775
<b>Theoretical DNA Yield (µg)</b>	0.3~0.8	1~20	2.5~40	5~80	12~100	25~200	50~400	50~800	150~2400	300~2800

**PUREGENE DNA Isolation Kit Reagent Volumes For Body Fluids (25 µl to 200 µl Body Fluids)**

<b>Volume Body Fluid (µl)</b>	25	50	100	150	200
<b>Tube Size (ml)</b>	1.5	1.5	1.5	2.0	15
<b>Cell Lysis Solution (µl)</b>	0.125	0.25	0.50	0.75	1.00
<b>Rnase A (µl)</b>	0.75	1.5	3.0	1.5	6.0
<b>Protein Precipitation Solution (ml)</b>	0.05	0.1	0.2	0.3	0.4
<b>100% Isopropanol (ml)</b>	0.15	0.3	0.6	0.9	1.2
<b>70% Ethanol (ml)</b>	0.15	0.3	0.6	0.9	1.2
<b>DNA Hydration Solution (µl)</b>	10.0	10.0	20.0	30.0	40