Project: Genome-wide DNA methylation estimation with multiplex target methylation sequencing assay.

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| --- | --- | --- |
| Items | Each sample or total project | Sum (10,000 samples) |
| Nucleic Acid Isolation from Tissue | Done my MCRI | Free |
|  |  |  |
| Sodium bisulfite(500g) | 200$/500g | 200$ |
| Methylation Sequencing Primer | 13$/50nm | 13$ |
| Rubicon ThruPlex DNA-seq Kit  60 i7 index |  | 12240$/25nm |
| Rubicon ThruPlex DNA-seq Kit  8 i5 index |  |
| QIAquick Spin Columns (100) | 123$/100 | 123$x100=1,2300$ |
| DNA-seq library preparation | 2$ (PCR+30 libraries) | 2$x10000=20,000$ |
| Mi-seq (50000x depth each insertion) | 750$/run(384 samples) | 750$x30 run= 22500$ |
| Other chemistry or Consumables | -- | -- |
|  |  |  |

We estimated the total cost are:

~67,253$ for 10000 samples.

~39,853$ for 5000 samples

~26,153$ for 2500 samples

~19,303$ for 1250 samples

~15,193$ for 384 samples

Project: Target methylation sequencing (10 candidate genes) for cell-free DNA methylation biomarker research

Sample Size: 384

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| --- | --- | --- |
| Items | Each sample or total project | Sum (10,000 samples) |
| Nucleic Acid Isolation from Tissue | Done my MCRI | Free |
| Sodium bisulfite(500g) | 200$/500g | 200$ |
| Maxwell® RSC ccfDNA Plasma Kit | 717$/48 Rxns | 5736$ |
| SMARTer ThruPLEX Plasma-Seq Kit | 480 Rxns | 10,560$ |
| EZ DNA Methylation Kit | 475$/200Rxns | 912$ |
| Methylation Sequencing Primers (50 panels) | 13$/50nm | 650$ |
| Illumina Free Adapter Blocking Reagent | 12Rxns | 125$ |
| Nextera XT DNA Library Preparation Kit | 24Rxns | 860$ |
| QIAseq 96-Index I Set A | Plan B | 5037x3=15,111$/50nm |
| QIAseq 96-Index I Set B |
| QIAseq 96-Index I Set C |
| QIAquick Spin Columns (100) | 123$/100 | 123$x3.84= 472.32$ |
| DNA-seq library preparation | 2$ (PCR+30 libraries) | 2$x384=768$ |
| Mi-seq (50000x depth each insertion) | 150$/run(384 samples) | 1500$/run= 1500$ |
| Other chemistry or Consumables | -- | -- |
|  |  |  |

Total cost: 36899.32