

# Myeloid DNA Reference Standard

This cancer-specific Reference Standard contains 22 variants across 19 genes relevant to the genetic testing of myeloid cancer. Horizon's cell line-derived Reference Standards are developed for the validation of NGS, PCR-based tests and other novel assays used for the sequencing of myeloid samples.

## Features

- Cell line-derived control for the closest representation of your patient sample
- ddPCR/Sanger validation for 22 variants with defined allelic frequencies
- Contains a novel 300bp insertion in FLT3
- Variants present at 5% - 70% allelic frequencies

## Applications

- Analyze the sensitivity and accuracy of your assay
- Gain certainty of your assay's Limit of Detection (LOD)
- Optimize and validate new myeloid assays and routinely monitor their performance

## Genes and Variants

- 19 genes relevant to myeloid cancer
- 22 variants
- 16 SNPs (SNVs), 6 INDELS

## Verified Mutations

Gene	Amino Acid Change	Genomic Position	Reference	Alternative	Variant Type	COSMIC ID	Expected Allele Frequency (%)
ABL1	T315I	133748283	C	T	SNP	COSM12560	5
ASXL1	G646fs*12	31022441	A	AG	INS	COSM1411076	40
ASXL1	W796C	31022903	G	T	SNP	COSM1681610	5
BCOR	Q1174fs*8	39923086	G	GT	INS	COSM3732385	70
CBL	S403F	119148988	C	T	SNP	COSM1676499	5
DNMT3A	R882C	25457243	G	A	SNP	COSM53042	5
EZH2	R418Q	148514471	C	T	SNP	COSM3259655	5
FLT3	D835Y	28592642	C	A	SNP	COSM783	5
FLT3	ITD300	28608047	A	300bp ins	INS	N/A	5
GATA1	Q119*	48650385	C	T	SNP	N/A	10
GATA2	G200fs*18	128204841	AC	A	DEL	COSM1418772	35
IDH1	R132C	209113113	G	A	SNP	COSM28747	5
IDH2	R172K	90631838	C	T	SNP	COSM33733	5
JAK2	F537-K539>L	5070021	TTCACAA	T	DEL	COSM24437	5
JAK2	V617F	5073770	G	T	SNP	COSM12600	5
KRAS	G13D	25398281	C	T	SNP	COSM532	40
NPM1	W288fs*12	170837543	C	CTCTG	INS	COSM158604	5
NRAS	Q61L	115256529	T	A	SNP	COSM583	10
RUNX1	M267I	36206711	C	T	SNP	COSM1681955	35
SF3B1	G740E	198266713	C	T	SNP	COSM133120	5
TET2	R1261H	106164914	G	A	SNP	COSM211643	5
TP53	S241F	7577559	G	A	SNP	COSM10812	5

## Product Specification

Catalog Number	<b>HD829</b>
Format	<b>gDNA</b>
Quantity	<b>500ng</b>
Concentration	<b>25ng/μl</b>
Quality Certificate	<b>ISO 13485</b>

### If you have any questions, contact

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