

biotechne
diagnostics™

Simplified, Sensitive, & Scalable JAK2 V617F Mutation Detection

The QuantideX® qPCR JAK2 Kit delivers highly sensitive and quantitative detection of the JAK2 V617F mutation relative to an endogenous control sequence—both measured simultaneously in a streamlined, one-well workflow, with data analysis software included and results in less than 2.5 hours.

End-to-end solution simplifying molecular testing for this critical biomarker used in management of Myeloproliferative Neoplasm conditions (MPNs).

Reduced Complexity

- JAK2 V617F mutation quantitative detection in one reaction.
- Ready-to-use kit with all qPCR reagents, controls, and calibrators included.
- Compatible with commonly used laboratory equipment.

Optimized Workflow

- Multiplex design reduces run setup steps and maximizes plate-well efficiency.
- Harmonized assay design enables combined batching with other QuantideX qPCR HemOnc kits.
- Supports wide range of DNA input and multiple DNA isolation methods.
- Automated data analysis and reporting software included.

Quality Results

- High sensitivity exceeding ELN/IWG-MPN recommendations and WHO reference panel.
- Sample-specific reaction LODs automatically calculated and reported.

Highly Sensitive Results

TABLE 1

High analytical sensitivity with a LOD/LOQ of 0.0126% using 165 ng target DNA, validated across 360 measurements, two lots, and three qPCR platforms, achieving >97% detection rate.

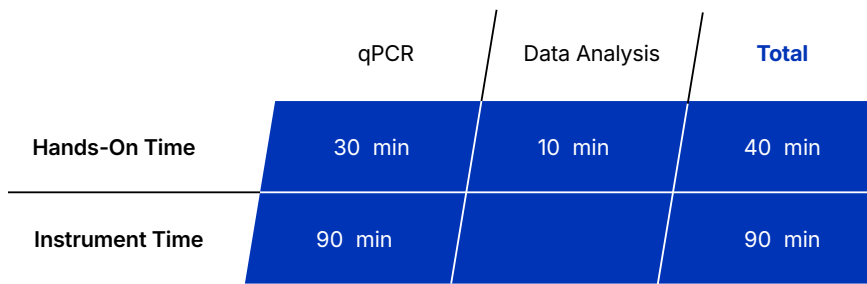
	LOD	Kit Lot		Overall by Platform
		38800	38922	
Platform	7500	0.0126	0.00785	0.00981
	QS5	0.0109	0.0123	0.0116
	QS7	0.00832	0.00986	0.00929
	Overall by Lot	0.0102	0.00986	0.0101

LOD/LOQ studies based on prospectively collected clinical samples

ELN: European Leukemia Network
IWG-MPN: International Working Group—Myeloproliferative Neoplasms Research and Treatment
WHO: World Health Organization

QuantideX qPCR JAK2 Kit and Software Analysis Module Workflow

FIGURE 1

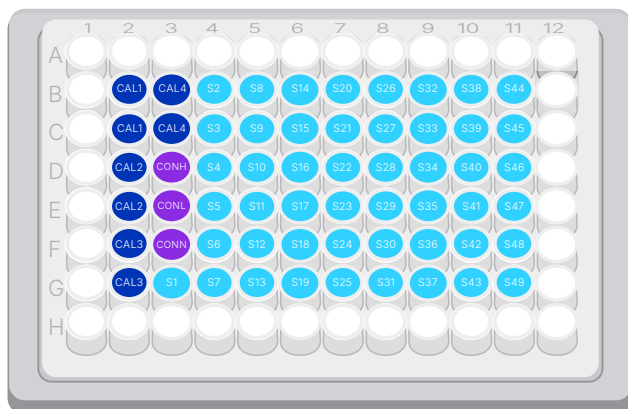


- Whole blood and bone marrow aspirate samples in K₂EDTA tubes.
- Standard blood DNA extraction method prior to qPCR.
- QuantideX JAK2 Analysis Software Module included with kit.
- <2.5 hours including hands-on and instrument time.

Scalability with Harmonized qPCR Conditions for All QuantideX Portfolio Kits

FIGURE 2

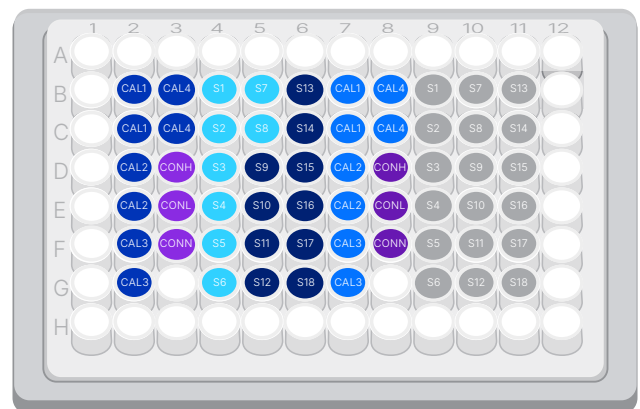
QuantideX® qPCR JAK2 Kit



Multiplexed singleton design with one reaction per sample (excluding controls and calibrators) enables larger batches and simplifies setup—**up to 49 samples per kit and plate.**

FIGURE 3

QuantideX® BCR-ABL Minor + JAK2 V617F Example



Harmonized assay conditions allow mixed batching of up to **19 singleton samples per assay** when combining two assays on a single qPCR plate.

Ordering Information

Part No.	Product	Reactions
A01060	QuantideX qPCR JAK2 Kit	60

Kit Contents:

Diluent, PCR Mix, JAK2 Primer Probe Mix, 4 JAK2 Calibrators, 3 JAK2 Controls (2 positive, 1 negative). 60 reactions with 4 freeze-thaws.

biotechne diagnostics

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

Bio-Techne Diagnostics™ and Bio-Techne® are trademarks or registered trademarks of Bio-Techne Corporation and affiliated entities. All other trademarks, service marks, and trade names are the property of their respective owners. Any use of third-party names, logos, or marks does not imply affiliation, sponsorship, or endorsement. © 2026 Bio-Techne.

40335.0.0426



Contact Us

Scan the QR code or visit
[bio-technediagnosics.com](https://www.biotechne.com)