HOW TO IDENTIFY

THE KRAS G12C MUTATION IN NSCLC

One of the most prevalent driver mutations in NSCLC, occurring in 13% (~1 in 8) of non-squamous patients¹

TEST

The KRAS G12C point mutation can be detected in both tissue (tumor) and liquid (plasma) biopsy specimens using well-validated common molecular testing methods, like NGS and PCR²⁻⁴



Most **NGS** panels already include *KRAS G12C*^{2,5,6}



When ordering single-gene biomarker tests, consider adding *KRAS G12C* when appropriate⁷



KRAS mutations are truncal in nature: their status can be **tested** at diagnosis and is unlikely to change over time⁸⁻¹⁰

RESULTS



- Consider recording *KRAS <u>G12C</u>* point mutation status in your patients' notes for ease of reference^{11,12}
- For previously tested patients, check with your lab and ask for their KRAS G12C results
- Positive liquid biopsy results are sufficient to inform treatment plans. If results are negative, consider performing a tissue test when feasible^{7,13,14}



• Consider **reporting** the **specific** *KRAS* **point mutation** (eq. *KRAS G12C*)¹¹

See the following page for a list of some national reference labs that offer testing for KRAS G12C.





BELOW IS A LIST OF SOME NATIONAL REFERENCE LABS THAT OFFER TESTING FOR KRAS G12C

ARUP Laboratories

Salt Lake City, UT https://www.aruplab.com (800) 522-2787

Biocept

San Diego, CA https://biocept.com (888) 332-7729

Biodesix

Boulder, CO https://www.biodesix.com (866) 432-5930

Caris Life Sciences

Phoenix, AZ https://www.carislife sciences.com (888) 979-8669

Circulogene Theranostics

Birmingham, AL https://circulogene.com (855) 614-7083

Foundation Medicine

Cambridge, MA https://www.foundationmedicine.com (888) 988-3639

GenPath Diagnostics

Elmwood Park, NJ https://www.genpathdiagnostics.com (800) 627-1479

Guardant Health

Redwood City, CA https://guardanthealth.com (855) 698-8887

LabCorp / Integrated Oncology / US Labs

Phoenix, AZ https://www.labcorp.com AZ: (800) 710-1800 CT/NY: (800) 447-5816 TN: (800) 874-8532

Mayo Clinic Laboratories

Rochester, MN https://www.mayocliniclabs.com (800) 533-1710 or (507) 266-5700

NeoGenomics Laboratories

Aliso Viejo, CA https://neogenomics.com/ (866) 776-5907 (option 3)

Novogene Corporation Inc.

Sacramento, CA https://en.novogene.com (916) 252-0068

Paradigm Cancer Diagnostics

Phoenix, AZ https://www.paradigmdx.com (844) 232-4719

Predicine

Hayward, CA https://www.predicine.com (650) 300-2188

Quest Diagnostics

Teterboro, NJ https://www.quest diagnostics.com (866) 697-8378

Tempus

Chicago, IL https://www.tempus.com (800) 739-4137

TriCore Reference Laboratories

Albuquerque, NM http://www.tricore.org/home (505) 938-8888 or (800) 245-3296

The above is a list of facilities with high testing volume that are CLIA certified and accept external samples. CLIA certification was validated using the CDC website, and acceptance of external samples was confirmed by reviewing facility websites and/or contacting facilities directly. Amgen neither recommends nor endorses, and may or may not have financial relationships with, any facility that appears on this list. This list is not intended to be a comprehensive list nor as a referral to any lab listed. If you would like to suggest a facility to be added to this list, please contact Amgen MedInfo at 800 77-AMGEN.

This information is current as of September 8, 2020. Amgen does not guarantee the accuracy of this information, and it is up to the individual healthcare professional to conduct his/her own research.

CLIA, Clinical Laboratory Improvement Amendments.

References: 1. Data on file, Amgen; [Analysis of AACR Genie v8]. 2. FoundationOne® CDx. https://assets.ctfassets.net/w98cd481qyp0/41rJj28gFwtxCwHQxopaEb/4031a74e169f2ebf04f7e6cb307141c3/FoundationOne_CDx_Label_Technical_Info.pdf. Accessed December 1, 2020. 3. Leighl NB, et al. Clin Cancer Res. 2019;25(15):4691-4700. 4. QIAGEN. https://www.qiagen.com/us/resources/download.aspx?id=59192bf9-d987-4de9-9130-649a87666d38&lang=en. Accessed December 1, 2020. 5. Guardant360. https://guardant360cdx.com/wpcontent/uploads/2020/09/Guardant360CDx_Label_Technical_Info.pdf. Accessed December 1, 2020. 6. Sherwood JL, et al. ESMO Open. 2017;2(4):e000235. 7. Lindeman NI, et al. Arch Pathol Lab Med. 2018;142(3):321-346. 8. lacobuzio-Donahue CA, et al. Nature Cancer. 2020;1:3-6. 9. McGranahan N, et al. Sci Trans Med. 2015(4);7(283):283ra54. 10. Skoulidis F, et al. Nat Rev Cancer. 2019;19(9):495-509. 11. Li MM, et al. J Molec Diagn. 2017;19:1-19. 12. Kim ES, et al. J Thorac Oncol. 2019;14:338-342. 13. Rolfo C, et al. J Thorac Oncol. 2018;13:1248-1268. 14. Gregg JP, et al. Transl Lung Cancer Res. 2019;8:286-301.

