

# Department of Pathology and Laboratory Medicine - Central Zone Laboratory Requisition – Molecular Diagnostics

Gray fields indicate required information to prevent delay or rejection of sample.

## Authorized requestor's information:

Ordering clinician/practitioner \_\_\_\_\_  
 PRN (Physician registration #) \_\_\_\_\_  
 Address \_\_\_\_\_  
 Telephone (for critical results) (\_\_\_\_\_) \_\_\_\_\_

☐ **Copy to clinician/practitioner name** \_\_\_\_\_  
**PRN** \_\_\_\_\_ **Location** \_\_\_\_\_

**Priority:** ☐ Routine ☐ Urgent

☐ Standing order request – indicate test and frequency:

Authorized requestor's signature \_\_\_\_\_  
 Date signed \_\_\_\_\_ (requisition expires one year from this date)

## \*Sample information (blood, bone marrow, fluid, cells)

- ☐ Peripheral blood (EDTA) (CBC printout needed if outside CZ)
- ☐ Bone marrow (EDTA) Bone Marrow # \_\_\_\_\_
- ☐ Bone core biopsy: 5-10mm<sup>3</sup> in sterile medium, or frozen
- ☐ Body fluid: fresh, or frozen \_\_\_\_\_  
 Indicate fluid type: \_\_\_\_\_
- ☐ Other \_\_\_\_\_ (see reverse for collection requirements)

Time stamp (for lab use only):

## Patient's information:

Name \_\_\_\_\_ Last \_\_\_\_\_ First \_\_\_\_\_ Middle \_\_\_\_\_  
 Full address \_\_\_\_\_ Street \_\_\_\_\_  
 \_\_\_\_\_ City/Town \_\_\_\_\_ Province \_\_\_\_\_ Postal code \_\_\_\_\_  
 HCN (Health card #) \_\_\_\_\_  
 Health card province \_\_\_\_\_ Expiry date \_\_\_\_\_ YYYY / MM / DD  
 Unique identifier # \_\_\_\_\_ (if HCN is not available) Type \_\_\_\_\_ (see reverse)  
 Date of birth \_\_\_\_\_ YYYY / MM / DD ☐ Male ☐ Female  
 Telephone (\_\_\_\_\_) \_\_\_\_\_ (12 hours from collection)

Third party billing: ☐ Workers' Compensation Board (WCB)  
☐ Research account SAP # \_\_\_\_\_  
☐ Self pay \_\_\_\_\_  
☐ Other \_\_\_\_\_

Clinical information \_\_\_\_\_

Relevant medications \_\_\_\_\_

Collected by signature \_\_\_\_\_ ID # \_\_\_\_\_ (from Central Zone)  
 Date collected \_\_\_\_\_ YYYY / MM / DD Time \_\_\_\_\_ (24-hour clock) hrs

## \*Sample information (FFPE, Fresh/Frozen)

- ☐ FFPE, Case and block#: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_
- ☐ Tumor content/purity(%): \_\_\_\_\_
- Provided as: ☐ Slides, \_\_\_\_\_ x10µm ☐ Scrolls, \_\_\_\_\_ x20µm

## Patient history

☐ New Diagnosis ☐ Relapse ☐ Follow-up/Monitoring ☐ Requires treatment

## Tests required – Send requisition along with sample.

For use only within NSH: ☐ TBD by a Pathologist

### HEMATOLOGY

#### Acute Lymphoblastic Leukemia

- ☐ BCR::ABL1, t(9;22) Quantitative
- ☐ KMT2A::AFF1, t(4;11)

#### Acute Myeloid Leukemia

- ☐ CBFβ::MYH11, inv(16)
- ☐ FLT3
- ☐ NGS, Myeloid<sup>1</sup>
- ☐ PML::RARA, t(15;17) Quantitative
- ☐ RUNX1::RUNX1T1, t(8;21)

#### Chronic Lymphocytic Leukemia

- ☐ IGHV somatic hypermutation
- ☐ MLPA (deletion 17p13, 13q14, 11q23, trisomy 12)
- ☐ NGS (MYD88, NOTCH1, SF3B1, TP53)<sup>1</sup>

#### Chronic Myelomonocytic Leukemia

- ☐ NGS, Myeloid<sup>1</sup>

#### Hairy Cell Leukemia

- ☐ NGS (BRAF)<sup>1</sup>

#### Lymphoma

- ☐ B cell clonality
- ☐ T cell clonality
- ☐ NGS (MYD88)<sup>1</sup>

#### Mantle Cell Lymphoma

- ☐ NGS (TP53)<sup>1</sup>

#### Mastocytosis

- ☐ NGS, Myeloid<sup>1</sup>

#### Myelodysplastic Syndrome

- ☐ NGS, Myeloid<sup>1</sup>

#### Myeloproliferative Neoplasm

- ☐ BCR::ABL1, t(9;22) Quantitative
- ☐ JAK2 (V617F) mutation
- ☐ NGS, Myeloid<sup>1</sup>

### SOLID TUMORS (restrictions in brackets)<sup>2</sup>

#### Breast

- ☐ HER2 FISH
- ☐ NGS, Ampliseq Focus<sup>1</sup> (Metastatic, HR+, HER2-)

#### Bladder

- ☐ NGS, Ampliseq Focus<sup>1</sup>

#### Colon

- ☐ NGS, Ampliseq Focus<sup>1</sup> (Metastatic)

#### MSI / MMR

#### Gastrointestinal Stromal Tumor

- ☐ (GIST, high risk and metastatic)

- ☐ NGS, Ampliseq Focus<sup>1</sup>

#### Lymphoma

- ☐ DLBCL – MYC FISH

- ☐ MCL – TP53, TST15

#### Lung (Non-squamous NSCLC)

- ☐ NGS, Ampliseq Focus<sup>1</sup>

- ☐ ROS1 IHC/ FISH

#### Melanoma (Stage ≥ pT3b)

- ☐ NGS, Ampliseq Focus<sup>1</sup>

#### Ovary (High grade epithelial)

- ☐ Somatic BRCA1/2, NGS

#### Prostate (Metastatic)

- ☐ Somatic BRCA1/2, NGS

#### Sarcoma

- ☐ Ewing's sarcoma + synovial sarcoma

#### Thyroid

- ☐ NGS, Ampliseq Focus<sup>1</sup>

#### Cancer of unknown primary

Please provide details in Comment section below

- ☐ NGS, Ampliseq Focus<sup>1</sup>

## Comment / Other tests

## Laboratory Contact Information

QEII Health Sciences Centre – Mackenzie Building, Room 512, 5788 University Ave. Halifax, NS B3H 1V8  
**Phone:** 902-473-6665 **Fax:** 902-425-5517 **Email:** molecular diagnosticslab@nshealth.ca

**\*Please refer to the Laboratory Test Catalogue at:**

<https://www.cdha.nshealth.ca/pathology-laboratory-medicine-department-2> for specimen collection requirements.

<sup>1</sup>For complete list of genes covered by the Illumina AmpliSeq Focus or TruSight Myeloid NGS panels, see tables below.

<sup>2</sup>Based on Nova Scotia guidelines for appropriate testing practices.

### Ampliseq Focus Panel

| DNA: genes covered for hotspot variants (exons in brackets) and/or *amplifications |                         |                    |                          |                               |
|------------------------------------------------------------------------------------|-------------------------|--------------------|--------------------------|-------------------------------|
| AKT1 (3)                                                                           | DDR2 (5)                | FGFR3* (7,9,14,16) | JAK2 (14)                | MYC*, MYCN*                   |
| ALK* (21-25)                                                                       | EGFR* (3,7,12,15,18-21) | FGFR4*             | JAK3 (11-12,15)          | NRAS (2-4)                    |
| AR* (6,8)                                                                          | ERBB2* (8,17-22)        | GNA11 (4-5)        | KIT* (8-11,13,17)        | PDGFRA* (12,14,18)            |
| BRAF* (11,15)                                                                      | ERBB3 (2-3,6,8-9)       | GNAQ (4-5)         | KRAS* (2-4)              | PIK3CA* (2,5-6,8,10,14,19,21) |
| CCND1*                                                                             | ERBB4 (18)              | HRAS (2-3)         | MAP2K1 (2-3,6)           | RAF (7,12)                    |
| CDK4* (2)                                                                          | ESR1 (9)                | IDH1 (4)           | MAP2K2 (2)               | RET (10-11,13,15-16)          |
| CDK6*                                                                              | FGFR1*                  | IDH2 (4)           | MET* (14,16,19)          | ROS1 (36,38)                  |
| CTNNB1 (3)                                                                         | FGFR2* (7,9,12,14)      | JAK1 (14-16)       | MTOR (30,39-40,43,47,53) | SMO (4,6,8-9)                 |

### RNA: driver gene fusions

|      |       |       |       |        |      |
|------|-------|-------|-------|--------|------|
| ABL1 | BRAF  | ETV1  | FGFR2 | NTRK2  | RAF1 |
| ALK  | EGFR  | ETV4  | FGFR3 | NTRK3  | RET  |
| AKT3 | ERBB2 | ETV5  | MET   | PDGFRA | ROS1 |
| AXL  | ERG   | FGFR1 | NTRK1 | PPARG  |      |

### TruSight Myeloid Panel

| DNA: genes covered for hotspot variants (exons in brackets) |                 |                    |                   |                          |
|-------------------------------------------------------------|-----------------|--------------------|-------------------|--------------------------|
| ABL1 (4-6)                                                  | CEPBA           | HRAS (2-3)         | MYD88 (3-5)       | SF3B1 (13-16)            |
| ASXL1 (12)                                                  | CSF3R (14-17)   | IDH1 (4)           | NOTCH1 (26-28,34) | SMC1A (2,11,16-17)       |
| ATRX (8-10,17-31)                                           | CUX1            | IDH2 (4)           | NPM1 (12)         | SMC3 (10,13,19,23,25,28) |
| BCOR                                                        | DNMT3A          | IKZF1              | NRAS (2-3)        | SRSF2 (1)                |
| BCORL1                                                      | ETV6/TEL        | JAK2 (12,14)       | PDGFRA (12,14,18) | STAG2                    |
| BRAF (15)                                                   | EZH2            | JAK3 (13)          | PHF6              | TET2 (3-11)              |
| CALR (9)                                                    | FBXW7 (9-11)    | KDM6A              | PTEN (5,7)        | TP53 (2-11)              |
| CBL (8-9)                                                   | FLT3 (14-15,20) | KIT (2,8-11,13,17) | PTPN11 (3,13)     | U2AF1 (2,6)              |
| CBLB (9-10)                                                 | GATA1 (2)       | KRAS (2-3)         | PAR21             | WT1 (7,9)                |
| CBLC (9-10)                                                 | GATA2 (2-6)     | MLL (5-8)          | RUNX1             | ZRSR2                    |
| CDKN2A                                                      | GNAS (8-9)      | MPL (10)           | SETBP1 (4)        |                          |