

**Genomic Diagnostics Laboratory**

Manchester Centre for Genomic Medicine,

(6th Floor) St. Mary’s Hospital

Oxford Road, Manchester M13 9WL

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Email: mft.Pharmaco.GeneticsRequests@nhs.net

www.mangen.co.uk

Director of Laboratories: Dr L Gaunt

 **REQUEST FOR CNS TUMOUR TESTING**

**PLEASE COMPLETE SECTION 1-3 AND EITHER FORWARD TO THE PATHOLOGY LABORATORY HOLDING THE SAMPLE, OR IF YOU REQUIRE THE GENOMIC DIAGNOSTICS LABORATORY TO OBTAIN THE SPECIMEN PLEASE FORWARD TO mft.Pharmaco.GeneticsRequests@nhs.net. Section 4 IS INTENDED to be completed by the pathology laboratory.**

**1. PATIENT DETAILS *(affix a printed label if available)*** Sex: M F

Forename(s):

Surname:

DoB:

NHS No:

Hosp No:

Address:

Postcode:

**2. REFERRER DETAILS**

Consultant:

Date of request:

Address for reporting/

invoicing:

Tel:

Email1

*1Reports will be sent to multiple emails if required (requires account registration for secure email - contact laboratory for further information)*

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| **3. TEST REQUEST *(please select options by placing a tick or cross next to each test required)****1. See overleaf for sample requirements. 2. If a hypermethylation test in addition to another test is required please send a* ***further*** *4 x 5uM sections. 3. For KIAA1549:BRAF fusion, C110rf95:RELA fusion, and EGFRvIII transcript testing please send 4x 5µM rolls. 4. Please note that all genes are tested and reported and this test may identify pathogenic germline variants. 5. NGS panel testing also available for research or clinical trial support.* | **Required** | **For GDL use ONLY** |
| 1p19q FISH1 |  | **FISH** |
| MGMT promoter hypermethylation2 |  | **Split for Bisulphite** |
| KIAA1549:BRAF fusion3  |  | **RNA extraction** |
| C11orf95:RELA fusion3 |  |
| EGFRvIII transcript3 |  |
| hTERT promoter mutations |  | **DNA extraction** |
| BRAF codon 600 mutation testing |  |
| Meningioma/schwannoma panel4 (NF2, SMARCB1, SMARCE1, SMARCA4, LZTR1) |  |
| NGS Glioma sub-panel4,5 – please circle any genes where analysis is a priority (AKT1; ALK; BRAF; CTNNB1; ERBB2; FGFR3; H3F3A; IDH1; IDH2; KIT; KRAS; MAP2K1; MET; NRAS; PIK3CA; PTEN; TERT; TP53) |  |
| NGS somatic cancer panel testing4,5 – please circle any genes where analysis is a priority (AKT1; ALK; AR; BRAF; CTNNB1; DDR2; EGFR; ERBB2; FGFR3; GNA11; GNAQ; IDH1; IDH2; KIT; KRAS; MAP2K1; MET; NRAS; PDGFRA; PIK3CA; PTEN; RET; STK11; TP53, H3F3A, TERT) |  |

**4. PATHOLOGY AND CLINICAL DETAILS**

Tumour Type/origin of organ:

Pathologist:

Hospital/Trust:

Pathology Block/Sample No:

Date sections sent to Genetics lab:

**Please indicate the approximate tumour cell content of the sample sent for analysis:**

*(this information is important and is used to ensure the test carried out is appropriately sensitive)*

 <10%\* 10-20%\* 20-30%\* >30%

*\*If sample is suitable for macrodissection, please include an H&E stained section with area(s) of tumour clearly circled and an estimate of neoplastic cell content within marked area \_\_\_\_\_\_\_\_\_\_\_%*

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**INFORMATION FOR PATHOLOGY LAB (ALL SAMPLES)**

* We require a minimum of 4x5uM unstained slide mounted sections or rolls from a pathology block. If requesting testing for KIAA1549:BRAF fusion, C110rf95:RELA fusion, and EGFRvIII transcript testing, we require an additional (minimum) 4 x 5µM rolls from a pathology block.
* We accept pathology blocks, but unstained slides are preferred (if pathology blocks are sent, TAT may increase by up to 7 calendar days for sample processing).
* If insufficient tissue available please contact the laboratory for advice.
* **If neoplastic cell content is <30% and sample suitable for macrodissection please also send a H&E stained slide with the area of tumour ringed and an estimate of neoplastic cell content within the marked area.**
* Sections should be cut under conditions that prevent cross contamination from other specimens.
* Slides carrying sections should be sent in a clean slide carrier. **Slides must be clearly marked with a patient or sample identifier** that matches details on this form or accompanying Pathology report. In addition please clearly label the container with **at least 2 patient identifiers.**
* Samples should be despatched as soon as possible as the patient’s treatment is dependent on the results of Genomic analysis.
* Please send samples to the address at the letterhead above.

**FISH TEST**

* Prepare 4 unstained sections (3uM thick) floated on the surface of a purified water bath set at 40oC (+/-2oC).
* Mount on positively charged slides and allowed to air-dry
* Also include 1 H&E slide with regions enriched for neoplastic cells marked by a Pathologist along with an estimate of neoplastic cell content in the marked area(s)

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* If insufficient tissue available please contact the laboratory for advice.
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**GUIDANCE FOR SAMPLE PREPARATION**

Complete Sections 1-3 of request form (available for download from [www.mangen.org.uk](http://www.mangen.org.uk))

Complete Sections 1-4 of request form (available for download from [www.mangen.org.uk](http://www.mangen.org.uk))

Oncologist/MDT

Oncologist/MDT

Pathology Review – complete section 4 of request form

Pathology Review – complete section 5 of request form

Sample has >30% neoplastic cell content1

Sample has >30% neoplastic cell content1

Sample has <30% neoplastic cell content1

Sample has <30% neoplastic cell content1

Send 4 x 5uM unstained slide mounted sections2

Send 4 x 5uM unstained slide mounted sections2

Prepare H&E stained slide with area of neoplasia highlighted. Also prepare 4 x5uM unstained mounted sections2,3

Prepare H&E stained slide with area of neoplasia highlighted. Also prepare 4 x5uM unstained mounted sections2,3

Sample with <10% neoplastic cell content & unsuitable for macrodissection – contact Genetics lab for advice

Sample with <10% neoplastic cell content & unsuitable for macrodissection – contact Genetics lab for advice

*1Neoplastic cell content refers to the ratio of neoplastic nuclei as a proportion of total nuclei in the tissue section*

*2Change or clean microtome blade between samples to reduce cross contamination*

*3H&E and unstained sections should be neighbouring from block and in same orientation*

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*2Change or clean microtome blade between samples to reduce cross contamination*

*3H&E and unstained sections should be neighbouring from block and in same orientation*

**NOTE:** we accept pathology blocks, however, unstained slides are preferred. If pathology blocks are sent, TAT may increase by up to 14 calendar days for sample processing.

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Pathology Laboratory

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Securely send test request form to Pathology laboratory holding the specimen

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