

Anforderungsschein **FISH**-Analysen für **myeloische** und **lymphatische** Neoplasien

| AML Standardpanel | | O |
|-------------------|--------------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 3 | RPN1/MECOM (3q21/3q26) | O |
| 4 | TET2 (4q24) | O |
| 5 | EGR1/D5S23/D5S721 (5q31) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 8 | CEP 8 | O |
| 8/21 | RUNX1/RUNX1T1 t(8;21)(q22;q22) | O |
| 11 | KMT2A (MLL) (11q23) | O |
| 12/21 | ETV6/RUNX1 (12p13/21q22) | O |
| 15/17 | PML/RARA t(15;17)(q22;q12) | O |
| 16 | CBFB-MYH11 inv16(p13q22) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |

| MDS Standardpanel | | O |
|-------------------|--------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 1 | CDKN2C/CKS1B (1p32/q21) | O |
| 4 | TET2 (4q24) | O |
| 5 | EGR1/D5S23/D5S721 (5q31) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 8 | CEP 8 | O |
| 11 | KMT2A (MLL) (11q23) | O |
| 12/21 | ETV6/RUNX1 (12p13/21q22) | O |
| 13 | DLEU/LAMP(13q14/13q34) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |
| 20 | D20S108 (20q12) | O |
| X/Y | CEP X/Y | O |

| CMML und MDS/MPN overlap Syndrome | | O |
|-----------------------------------|-------------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 1 | CDKN2C/CKS1B (1p32/q21) | O |
| 3 | RPN1/MECOM (3q21/3q26) | O |
| 4 | TET2 (4q24) | O |
| 4 | PDGFRA (4q12) | O |
| 5 | EGR1/D5S23/D5S721 (5q31/5p15) | O |
| 5 | PDGFRB (5q33) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 8 | FGFR1 (8p11) | O |
| 8 | CEP 8 | O |
| 9 | JAK2 (9p24) | O |
| 9 | p16 (9p21)/9q21 | O |
| 9/22 | BCR/ABL t(9;22)(q34;q11) | O |
| 11 | KMT2A (MLL) (11q23) | O |
| 12/21 | ETV6/RUNX1 (12p13/21q22) | O |
| 13 | DLEU/LAMP(13q14/13q34) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |
| 20 | D20S108 (20q12) | O |
| X/Y | CEP X/Y | O |

| H2L Panel | | O |
|-----------|-------------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 5 | EGR1/D5S23/D5S721 (5q31/5p15) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 14 | IgH/BAP (14q32) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |

| ALL Standardpanel unklare Differenz. | | O |
|--------------------------------------|----------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 1 | ABL2 (1q25.2) | O |
| 5 | PDGFRB (5q33) | O |
| 6 | SEC63/MYB (6q21/6q23) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 7 | TCR beta (7q34) | O |
| 8 | CMYC (8q24) | O |
| 9 | P16 (9p21/9q21) | O |
| 9/22 | BCR/ABL t(9;22)(q34;q11) | O |
| 10 | TLX1 (10q24.3) | O |
| 11 | NUP98 (11p15) | O |
| 11 | KMT2A (MLL) (11q23) | O |
| 12/21 | ETV6/RUNX1 (12p13/21q22) | O |
| 14 | TCRA/D (14q11) | O |
| 14/18 | IgH/BCL2 t(14;18)(q32;q21) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |
| 19 | 19p13/19q13 | O |
| X | CRLF2 (Xp22.33) | O |

| B-ALL und Ph-like ALL Panel | | O |
|-----------------------------|----------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 1 | ABL2 (1q25.2) | O |
| 5 | PDGFRB (5q33) | O |
| 6 | SEC63/MYB (6q21/6q23) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 8 | CMYC (8q24) | O |
| 9 | P16 (9p21/9q21) | O |
| 9/22 | BCR/ABL t(9;22)(q34;q11) | O |
| 11 | KMT2A (MLL) (11q23) | O |
| 12/21 | ETV6/RUNX1 (12p13/21q22) | O |
| 14/18 | IgH/BCL2 t(14;18)(q32;q21) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |
| 19 | 19p13/19q13 | O |
| X | CRLF2 (Xp22.33) | O |

| T-ALL Panel | | O |
|-------------|-------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 1 | CDKN2C/CKS1B (1p32/q21) | O |
| 5 | TLX3 (5q35.1) | O |
| 6 | SEC63/MYB (6q21/6q23) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 7 | TCR beta (7q34) | O |
| 8 | CMYC (8q24) | O |
| 9 | P16 (9p21/9q21) | O |
| 9 | ASS1 (9q34) | O |
| 9 | NUP214 (9q34) | O |
| 10 | TLX1 (10q24.3) | O |
| 11 | NUP98 (11p15) | O |
| 11 | KMT2A (MLL) (11q23) | O |
| 14 | TCRA/D (14q11) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |

| MPN/CML/PMF/PV/ET Standardpanel | | O |
|---------------------------------|-------------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 1 | CDKN2C/CKS1B (1p32/q21) | O |
| 3 | RPN1/MECOM (3q21/3q26) | O |
| 4 | TET2 (4q24) | O |
| 4 | PDGFRA (4q12) | O |
| 5 | EGR1/D5S23/D5S721 (5q31/5p15) | O |
| 5 | PDGFRB (5q33) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 8 | FGFR1 (8p11) | O |
| 8 | CEP 8 | O |
| 9 | JAK2 (9p24) | O |
| 9 | P16 (9p21/9q21) | O |
| 9/22 | BCR/ABL t(9;22)(q34;q11) | O |
| 11 | KMT2A (MLL) (11q23) | O |
| 12/21 | ETV6/RUNX1 (12p13/21q22) | O |
| 13 | DLEU/LAMP(13q14/13q34) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |
| 20 | D20S108 (20q12) | O |
| X/Y | CEP X/Y | O |

| Morbus Waldenström Panel | | O |
|--------------------------|----------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 3 | BCL6 (3q27) | O |
| 4 | TET2 (4q24) | O |
| 6 | SEC63/MYB (6q21/6q23) | O |
| 7 | D7S522 (7q31)/CEP7 | O |
| 8 | CMYC (8q24) | O |
| 11 | ATM (11q22.3) | O |
| 12 | CEP 12/MDM2 (12q15) | O |
| 13 | DLEU/LAMP(13q14/13q34) | O |
| 14 | IgH/BAP (14q32) | O |
| 14/18 | IgH/BCL2 t(14;18)(q32;q21) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |
| 18 | MALT1 (18q21) | O |

| CLL Panel | | O |
|-----------|-----------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 2 | IGK (2p11) | O |
| 3 | BCL6 (3q27) | O |
| 6 | SEC63/MYB (6q21/6q23) | O |
| 8 | CMYC (8q24) | O |
| 11 | ATM (11q22.3) | O |
| 11/14 | IgH/CCND1 t(11,14)(q13;q32) | O |
| 12 | CEP 12/MDM2 (12q15) | O |
| 13 | DLEU/LAMP(13q14/13q34) | O |
| 14 | IgH/BAP (14q32) | O |
| 14/18 | IgH/BCL2 t(14;18)(q32;q21) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |
| 18 | MALT1 (18q21) | O |
| 19 | 19p13/19q13 | O |

| MM/MGUS Panel | | O |
|---------------|-----------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 1 | CDKN2C/CKS1B (1p32/q21) | O |
| 4/14 | IgH/FGFR3 t(4;14)(p16;q32) | O |
| 5 | D5S23/D5S721 (5p15.2) | O |
| 6/14 | IgH/CCND3 t(6;14)(p21;q32) | O |
| 8 | CMYC (8q24) | O |
| 9 | CEP 9 | O |
| 9 | ASS1 (9q34) | O |
| 11 | ATM (11q22.3) | O |
| 11/14 | IgH/CCND1 t(11,14)(q13;q32) | O |
| 13 | DLEU/LAMP(13q14/13q34) | O |
| 14 | IgH/BAP (14q32) | O |
| 14/16 | IgH/MAF t(14;16)(q32;q23) | O |
| 14/20 | IgH/MAFB t(14;20)(q32;q12) | O |
| 15 | CEP 15 | O |
| 17 | TP53/NF1 (17p13) | O |
| 19 | 19p13/q13 | O |

| Lymphom/NHL Panel | | O |
|-------------------|-------------------------------|------------|
| Chrom. | Sonde | Einzelanf. |
| 1 | TP73/ABL2 (1p36/1q25) | O |
| 2 | IGK (2p11.2) | O |
| 3 | BCL6 (3q27) | O |
| 5 | EGR1/D5S23/D5S721 (5q31/5p15) | O |
| 6 | SEC63/MYB (6q21/6q23) | O |
| 7 | KMT2E/EZH2 (7q22/7q36) | O |
| 8 | CMYC (8q24) | O |
| 11 | ATM (11q22.3) | O |
| 11/14 | IgH/CCND1 t(11,14)(q13;q32) | O |
| 12 | CEP 12/MDM2 (12q15) | O |
| 13 | DLEU/LAMP (13q14/13q34) | O |
| 14 | TCRA/D (14q11) | O |
| 14 | IgH/BAP (14q32) | O |
| 14/18 | IgH/BCL2 t(14;18)(q32;q21) | O |
| 17 | TP53/NF1 (17p13/17q11) | O |
| 18 | MALT1 (18q21) | O |
| 19 | 19p13/q13 | O |
| 22 | IGL (22q11) | O |

Panel- und Einzelanforderungsschein Mutationsanalysen für **myeloische** Neoplasien

| Myeloisches Panel (49 Gene) | | | | | | O | | | |
|-----------------------------|--------------------------|----------|--------------------------|-----------|--------------------------|--------|--------------------------|--------|--------------------------|
| ABL1 | <input type="checkbox"/> | CUX1 | <input type="checkbox"/> | HRAS | <input type="checkbox"/> | MYD88 | <input type="checkbox"/> | SETBP1 | <input type="checkbox"/> |
| ASXL1 | <input type="checkbox"/> | DNMT3A | <input type="checkbox"/> | IDH1 | <input type="checkbox"/> | NOTCH1 | <input type="checkbox"/> | SF3B1 | <input type="checkbox"/> |
| BCOR | <input type="checkbox"/> | EPOR | <input type="checkbox"/> | IDH2 | <input type="checkbox"/> | NPM1 | <input type="checkbox"/> | STAG2 | <input type="checkbox"/> |
| BCORL1 | <input type="checkbox"/> | ETV6/TEL | <input type="checkbox"/> | IKZF1 | <input type="checkbox"/> | NRAS | <input type="checkbox"/> | SRSF2 | <input type="checkbox"/> |
| BRAF | <input type="checkbox"/> | ETNK1 | <input type="checkbox"/> | JAK2 | <input type="checkbox"/> | PDGFRA | <input type="checkbox"/> | TET2 | <input type="checkbox"/> |
| CALR | <input type="checkbox"/> | EZH2 | <input type="checkbox"/> | JAK3 | <input type="checkbox"/> | PHF6 | <input type="checkbox"/> | TP53 | <input type="checkbox"/> |
| CBL | <input type="checkbox"/> | FLT3 | <input type="checkbox"/> | KIT | <input type="checkbox"/> | PPM1D | <input type="checkbox"/> | U2AF1 | <input type="checkbox"/> |
| CDKN2A | <input type="checkbox"/> | GATA1 | <input type="checkbox"/> | KRAS | <input type="checkbox"/> | PTPN11 | <input type="checkbox"/> | WT1 | <input type="checkbox"/> |
| CEBPA | <input type="checkbox"/> | GATA2 | <input type="checkbox"/> | KMT2A/MLL | <input type="checkbox"/> | RAD21 | <input type="checkbox"/> | ZRSR2 | <input type="checkbox"/> |
| CSF3R | <input type="checkbox"/> | GNAS | <input type="checkbox"/> | MPL | <input type="checkbox"/> | RUNX1 | <input type="checkbox"/> | | |

| AML Standardpanel | | O |
|--------------------------------------|-----------|--------------------------|
| FLT3-ITD | | <input type="checkbox"/> |
| NPM1 | | <input type="checkbox"/> |
| AML-Fusionsgenscreening | | <input type="checkbox"/> |
| RUNX1/RUNX1T1 | BCR-ABL | MLL-AF6 |
| CBFβ-MYH11 | NPM1-MLF1 | MLL-AF9 |
| DEK-CAN | PML-RARA | MLL-PTD |
| CALM-AF10 | MLL-ELL | |
| Myeloisches Panel (49 Gene) [s.oben] | | <input type="checkbox"/> |
| AML (MRD-Diagnostik) | | O |
| NPM1TypA | | <input type="checkbox"/> |
| RUNX1/RUNX1T1 | | <input type="checkbox"/> |
| PML-RARA | | <input type="checkbox"/> |
| BCR-ABL | | <input type="checkbox"/> |
| CBFβ-MYH11 | | <input type="checkbox"/> |
| MLL-PTD | | <input type="checkbox"/> |
| FLT3-ITD | | <input type="checkbox"/> |

| MPN Standardpanel | | O |
|-------------------|--|--------------------------|
| JAK2 (V617F) | | <input type="checkbox"/> |
| CALR | | <input type="checkbox"/> |
| MPL | | <input type="checkbox"/> |
| JAK2 (Exon 12) | | <input type="checkbox"/> |

| CML | | O |
|----------------------------------|--|--------------------------|
| BCR-ABL (qualitativ) | | <input type="checkbox"/> |
| BCR-ABL (quantitativ) | | <input type="checkbox"/> |
| TKI-Resistenzmutationsbestimmung | | <input type="checkbox"/> |

| aCML | | O |
|--------|--|--------------------------|
| CSF3R | | <input type="checkbox"/> |
| SETBP1 | | <input type="checkbox"/> |
| ETNK1 | | <input type="checkbox"/> |

| HES/Mastocytose/Eosinophilen-Leukämie | | O |
|---------------------------------------|--|--------------------------|
| cKIT | | <input type="checkbox"/> |
| JAK2 (p.V617F) | | <input type="checkbox"/> |
| cKIT (p.D816V) aus dem pB | | <input type="checkbox"/> |

| CNL | | O |
|-------|--|--------------------------|
| CSF3R | | <input type="checkbox"/> |

Panel- und Einzelanforderungsschein Mutationsanalysen für **lymphatische** Neoplasien

| ALL | | O |
|----------------------------------|--|--------------------------|
| BCR-ABL (qualitativ) | | <input type="checkbox"/> |
| BCR-ABL (quantitativ) | | <input type="checkbox"/> |
| TKI-Resistenzmutationsbestimmung | | <input type="checkbox"/> |
| TCR-gamma Klonalitätsnachweis | | <input type="checkbox"/> |

| Lymphom/NHL | | O |
|-------------------------------|--|--------------------------|
| IgH-Klonalitätsnachweis | | <input type="checkbox"/> |
| TCR-gamma Klonalitätsnachweis | | <input type="checkbox"/> |
| MYD88 | | <input type="checkbox"/> |

| CLL Panel | | O | | | |
|-------------------------|--------------------------|--------------------------|--------------------------|------|--------------------------|
| NOTCH 1 | <input type="checkbox"/> | SF3B1 | <input type="checkbox"/> | TP53 | <input type="checkbox"/> |
| IgH-Klonalitätsnachweis | | <input type="checkbox"/> | | | |
| IgHV-Mutationsstatus | | <input type="checkbox"/> | | | |

| BTK-Resistenz (DLBCL, CLL, MCL) | | O | |
|---------------------------------|--------------------------|-------|--------------------------|
| CARD11 | <input type="checkbox"/> | CXCR4 | <input type="checkbox"/> |
| CD79b | <input type="checkbox"/> | MYD88 | <input type="checkbox"/> |
| BTK | <input type="checkbox"/> | PLCG2 | <input type="checkbox"/> |

| Venetoclax-Resistenz | | O |
|----------------------|--|--------------------------|
| BCL2 (p.G101V) | | <input type="checkbox"/> |

| M. Waldenström | | O |
|----------------|--|--------------------------|
| MYD88 | | <input type="checkbox"/> |

| MGUS / Multiples Myelom | | O | |
|-------------------------|--------------------------|-------|--------------------------|
| NRAS | <input type="checkbox"/> | BRAF1 | <input type="checkbox"/> |
| KRAS | <input type="checkbox"/> | TP53 | <input type="checkbox"/> |

| T-LGL | | O |
|-------|--|--------------------------|
| STAT3 | | <input type="checkbox"/> |

| Splenisches Marginalzonen Lymphom (SMZL) | | O |
|--|--|--------------------------|
| NOTCH2 | | <input type="checkbox"/> |

| Haarzelleukämie (HZL) | | O |
|-----------------------|--|--------------------------|
| BRAF (V600E) | | <input type="checkbox"/> |

Individuelle Anfragen können von uns auch nach Absprache bearbeitet werden

O = Bitte ankreuzen