

National Hospital Organization Kyushu Cancer Center List of Clinical Laboratory Reference Values Revised: August 1, 2025

| Hematology | | |
|--------------------|-----------------|---------------------|
| Test Item | Reference Value | Unit |
| WBC | 3.3~8.6 | 10 ⁹ /μL |
| RBC | M4.35~5.55 | 10 ⁶ /μL |
| | F3.86~4.92 | |
| Hb | M13.7~16.8 | g/dL |
| | F11.6~14.8 | |
| Ht | M40.7~50.1 | % |
| | F35.1~44.4 | |
| MCV | 83.6~98.2 | fL |
| MCH | 27.5~33.2 | pg |
| MCHC | 31.7~35.3 | g/dL |
| RDW | 11.6~14.0 | % |
| PLT | 158~348 | W |
| MPV | 7.0~11.0 | fL |
| PDW | — | fL |
| PCT | — | % |
| NEUT | 38.5~80.5 | % |
| LYMP | 16.5~49.5 | % |
| MONO | 2.0~10.0 | % |
| EOS | 0.0~8.5 | % |
| BASO | 0.0~2.5 | % |
| Reticulocyte (%) | M0.77~2.43 | % |
| | F0.74~2.16 | % |
| Reticulocyte Count | M3.59~12.31 | 10 ⁴ /μL |
| | F3.20~9.90 | 10 ⁴ /μL |

| Biochemistry | | | |
|-------------------|--|--------|---------|
| Test Item | Reference Value | Unit | Remarks |
| Total Protein | 6.6~8.1 | g/dL | |
| Albumin | 4.1~5.1 | g/dL | |
| A/G Ratio | 1.32~2.23 | | |
| Total Bilirubin | 0.4~1.5 | mg/dL | |
| Direct Bilirubin | 0.1~0.4 | mg/dL | |
| AST | 13~30 | U/L | |
| ALT | M10~42 | U/L | |
| | F7~23 | | |
| LD | 124~222 | U/L | |
| ALP | 38~113 | U/L | |
| γGT | M13~64 | U/L | |
| | F9~32 | | |
| Cholinesterase | M240~486 | U/L | |
| | F201~421 | | |
| Total Cholesterol | 142~248 | mg/dL | |
| LDL-C | 65~163 | mg/dL | |
| Triglycerides | M40~234 | mg/dL | |
| | F30~117 | | |
| CRP | 0.00~0.14 | mg/dL | |
| UN | 8~20 | mg/dL | |
| Creatinine | M0.65~1.07 | mg/dL | |
| | F0.46~0.79 | | |
| Cystatin C | M0.58~0.98 | mg/L | |
| | F0.52~0.88 | | |
| Uric Acid | M3.7~7.8 | mg/dL | |
| | F2.6~5.5 | | |
| Na | 138~145 | mmol/L | |
| K | 3.6~4.8 | mmol/L | |
| Cl | 101~108 | mmol/L | |
| Ca | 8.8~10.1 | mg/dL | |
| Corrected Calcium | Calculation formula:(4.0-Alb) + Ca value | | |
| IP | 2.7~4.6 | mg/dL | |

| Biochemistry | | | |
|-------------------------------------|-----------------|--------|---------|
| Test Item | Reference Value | Unit | Remarks |
| Blood Glucose | 73~109 | mg/dL | |
| CK | M59~248 | U/L | |
| | F41~153 | | |
| CK-MB | ≤5.0 | ng/mL | |
| AMY | 44~132 | U/L | |
| P-AMY | 15~50 | U/L | |
| S-AMY | — | — | |
| Ammonia | 12~66 | μg/dL | |
| ICG(15') | 0~10 | % | |
| Fe | 40~188 | μg/dL | |
| TIBC | M253~365 | μg/dL | |
| | F246~410 | | |
| UIBC | 191~269 | μg/dL | |
| Creatinine Clearance | — | ml/min | |
| | Mg | | |
| Mg | 1.8~2.4 | mg/dL | |
| BNP | ≤18.4 | pg/mL | |
| proGRP | <81 | pg/mL | |
| Troponin T Qualitative | Qualitative (-) | | |
| High-sensitivity Cardiac Troponin I | ≤26.2 | pg/mL | |
| HbA1c(NGSP) | 4.9~6.0 | % | |
| Lipase | — | U/L | SRL |
| Selenium | — | μg/L | BML |
| pH* | 7.350~7.450 | pH | |
| pCO2* | 35.0~45.0 | mmHg | |
| pO2* | 80.0~100.0 | mmHg | |
| HCO3-act* | 22.0~26.0 | mmol/L | |
| HCO3-std* | M22.5~26.9 | mmol/L | |
| | F21.8~26.2 | | |

*Reference values are based on arterial blood. Measurement using venous blood is also acceptable.

| Immunoserology | | | |
|---|-----------------|----------|----------------|
| Test Item | Reference Value | Unit | Remarks |
| ASLO | — | | SRL |
| RF | — | IU/mL | SRL |
| Antinuclear Antibody | — | | SRL |
| Anti-DNA Antibody | — | | SRL |
| Thyroid Test | — | Titer | SRL |
| Microsome Test | — | Titer | SRL |
| Mycoplasma Antibody | — | Titer | SRL |
| Anti-HCV antibody (CLIA method) | <1.0 | S/CO | |
| HBs antigen (CLIA method) | <0.05 | IU/mL | |
| HBs antibody (CLIA method) | <10 | mIU/mL | |
| HBe antigen (CLIA method) | — | S/CO | SRL |
| HBe antibody (CLIA method) | — | INH% | SRL |
| HBc antibody (CLIA method) | <1.0 | S/CO | |
| HBV-DNA(TaqManPCR method) | — | LogIU/mL | BML |
| HCV-RNA(TaqManPCR method) | — | LogIU/mL | BML |
| TP antibody (latex turbidimetric immunoassay) | <10.0 | T.U. | |
| ATLA(PA method) | Qualitative (-) | | |
| HIV antibody (CLIA method) | <1.0 | S/CO | |
| IgA | 93~393 | mg/dL | |
| IgG | 861~1747 | mg/dL | |
| IgM | M33~183 | mg/dL | |
| | F50~269 | | |
| IgD | — | mg/dL | SRL |
| IgE | — | IU/mL | SRL |
| CH50 | — | IU/mL | SRL |
| C3 | — | mg/dL | SRL |
| C4 | — | mg/dL | SRL |
| Transferrin | — | mg/dL | SRL |
| Haptoglobin | 19~170 | mg/dL | |
| HTLV-1(CLIA method) | <1.0(Negative) | s/co | |
| Sp-D | — | ng/mL | SRL |
| Serum HCG | <25 | mIU/ml | Designated Day |

| Tumor Markers | | | |
|--------------------------|-----------------|--------|---------|
| Test Item | Reference Value | Unit | Remarks |
| AFP | 0.89~8.78 | ng/mL | |
| PIVKA-II | <40 | mAU/mL | |
| CEA | ≤5.0 | ng/mL | |
| SCC antigen | ≤1.5 | ng/mL | |
| CA19-9 | ≤37 | U/mL | |
| CA15-3 | ≤31.3 | U/mL | |
| CA-125 | ≤35 | U/mL | |
| sIL-2R | 122~496 | U/mL | |
| Elastase 1 | ≤300 | ng/mL | |
| Ferritin | M15~160 | ng/mL | |
| | F10~60 | | |
| β2-Microglobulin (Serum) | — | mg/L | SRL |
| Serum HCG | — | mIU/ml | SRL |
| PSA | ≤4 | ng/mL | |
| TSH | 0.35~4.94 | μIU/mL | |
| F-T4 | 0.70~1.48 | ng/dL | |
| F-T3 | 1.68~3.67 | pg/mL | |
| ACTH | — | pg/mL | SRL |
| Cortisol | 3.7~19.4 | μg/dL | |
| Intact PTH | — | pg/mL | SRL |
| Tacrolimus | — | ng/mL | |
| Cyclosporine | — | ng/mL | |
| Methotrexate | — | μmol/L | |
| CYFRA 21-1 | ≤2.1 | ng/mL | |
| Procalcitonin (PCT) | <0.05 | ng/mL | |
| KL-6 | 105~401 | U/mL | |
| β-D-Glucan | — | pg/mL | SRL |
| Cytomegalovirus (CF) | — | Titer | SRL |
| CMV antigen (C10, C11) | — | | SRL |

| Urinalysis | |
|-----------------------------|-----------------|
| Test Item | Reference Value |
| Urinalysis-Specific Gravity | 1.005~1.030 |
| Urinalysis-pH | 4.5~7.5 |
| Urinalysis-Protein | (-) |
| Urinalysis-Glucose | (-) |
| Urinalysis-Occult Blood | (-) |
| Urinalysis-Leukocyte | (-) |
| Urinalysis-Ketone Bodies | (-) |
| Urinalysis-Nitrite | (-) |
| Urinalysis-Urobilinogen | (±) |
| Urinalysis-Bilirubin | (-) |
| HCG Qualitative | Negative |

| Coagulation | | | |
|-------------|-----------------|---------|---------|
| Test Item | Reference Value | Unit | Remarks |
| PT(second) | 9.6~13.1 | seconds | |
| PT(%) | 70~130 | % | |
| PT(INR) | 0.81~1.03 | — | |
| APTT | 24.0~34.0 | seconds | |
| FIB | 200~400 | mg/dL | |
| FDP-P | Less than 5 | μg/mL | |
| D-dimer | Less than 1 | μg/mL | |
| AT | 80~130 | % | |
| Factor XIII | — | % | SRL |
| SFMC | — | μg/mL | SRL |
| TAT | — | ng/mL | SRL |
| PIC test | — | μg/mL | SRL |

※For tests outsourced to external laboratories, please refer to the respective laboratory reference ranges.
 ※At our institution, normal reference ranges and interpretive criteria are indicated as "Reference Value."