



## Trouble-Shooting Guide for ID-Cards

Quick Reference Chart

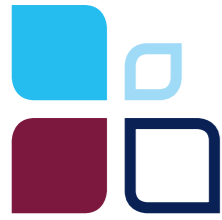


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# Trouble-Shooting Guide for ID-Cards Quick Reference Chart

**BIO-RAD**

## Problems

## Possible Causes

## Remedy

### False/Unexpected Positive Results

- ID-Cards showing gel dried out
  - Expired ID-Card
  - Seal damaged
  - Air bubbles in the gel
  - Direct Antiglobulin Test (DAT) positive cells
  - Polyagglutinable cells
  - Interference by enzyme autoagglutinins
  - Carry-over of antisera between microtubes
  - Incorrect cell suspension
  - Wharton's Jelly - cord blood
- Review storage temperature and conditions
  - Discard expired ID-Card and repeat the test with non-expired ID-Card
  - Repeat the test with properly sealed ID-Card
  - Visual check for bubbles prior to testing
  - Repeat using monoclonal ID-Card or warm-washed cells
  - Repeat using monoclonal ID-Cards
  - Repeat using monoclonal ID-Cards
  - Check pipetting technique
  - Pipette cells in reverse order
  - Ensure ID-Card is upright when opened
  - If droplets under the foil, centrifuge the ID-Card prior to use
  - Repeat with correct cell suspension
  - Wash cells and repeat

### Equivocal Results

- Centrifugation problems (ID-Card holder stuck, speed/time issues)
- Report to your field service contact point

### False/Unexpected Weak or Negative Results

- Plasma/serum omitted from test procedure
  - Wrong volume(s) used
  - Deterioration of antibody (poor storage, natural phenomenon)
  - Weak/missing isoagglutinins
  - Weak/missing antigens
  - Contamination of reagent cells
  - Post-transfusion
  - Post-Stem Cell/Bone Marrow Transplant
  - Large fetomaternal hemorrhage
  - Subgroups ( $A_3$ ,  $A_{weak}$ , etc.)
  - Chimerism
  - Sample contamination
  - Fibrin residues (trapping red blood cells)
  - Weakened antigens
- Repeat test - check level visually for plasma/serum addition
  - Check box insert for correct procedure
  - Fresh samples should be used for optimum results
  - Review clinical details (age of patient, medical diagnosis, therapy, etc.)
  - Review clinical details (age of patient, medical diagnosis, therapy, etc.)
  - Subgroup determination (ABO)
  - Test for weak D/partial D
  - Repeat with fresh set of cells
  - Review laboratory procedure
  - Review clinical history/treatment
  - Review clinical history/treatment
  - Appropriate further investigation
  - Appropriate further investigation
  - Appropriate further investigation
  - Repeat with fresh sample (review phlebotomy/laboratory procedures)
  - Serum/plasma should be well-centrifuged before use
  - Review clinical details e.g. in association with leukemia, old age, newborns etc.

### Double Cell Population Mixed Field Reaction

- Post-transfusion
  - Post-Stem Cell/Bone Marrow Transplant
  - Large fetomaternal hemorrhage
  - Subgroups ( $A_3$ ,  $A_{weak}$ , etc.)
  - Chimerism
  - Sample contamination
  - Fibrin residues (trapping red blood cells)
  - Weakened antigens
- Review clinical history/treatment
  - Review clinical history/treatment
  - Appropriate further investigation
  - Appropriate further investigation
  - Appropriate further investigation
  - Repeat with fresh sample (review phlebotomy/laboratory procedures)
  - Serum/plasma should be well-centrifuged before use
  - Review clinical details e.g. in association with leukemia, old age, newborns etc.

### Notes

- For specific problems in ABO or Rh typing, refer to the appropriate Quick Reference Chart for guidance.
- All laboratory procedures should be subject to internal quality control as part of Good Laboratory Practice.
- Report persistent problems to your local customer product support team, who will take the appropriate action required to resolve any difficulties.
- This chart is not necessarily comprehensive.