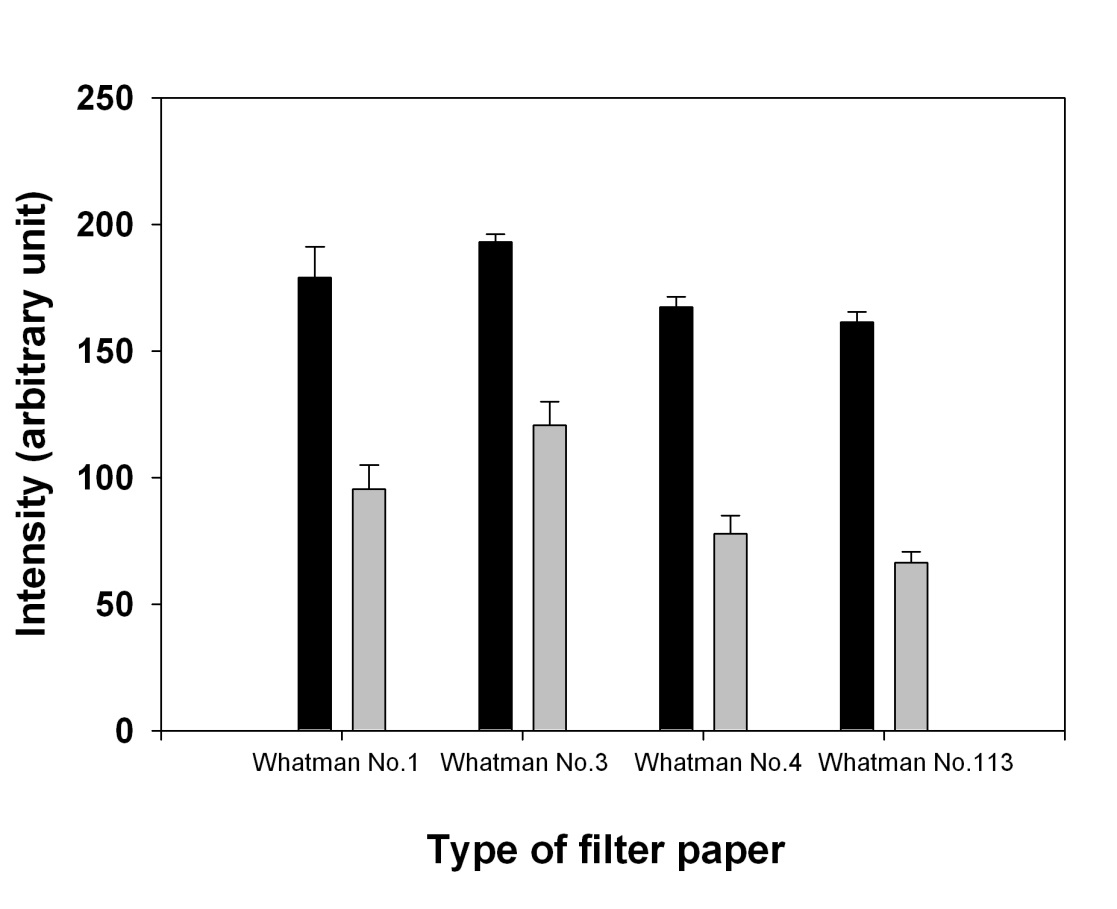
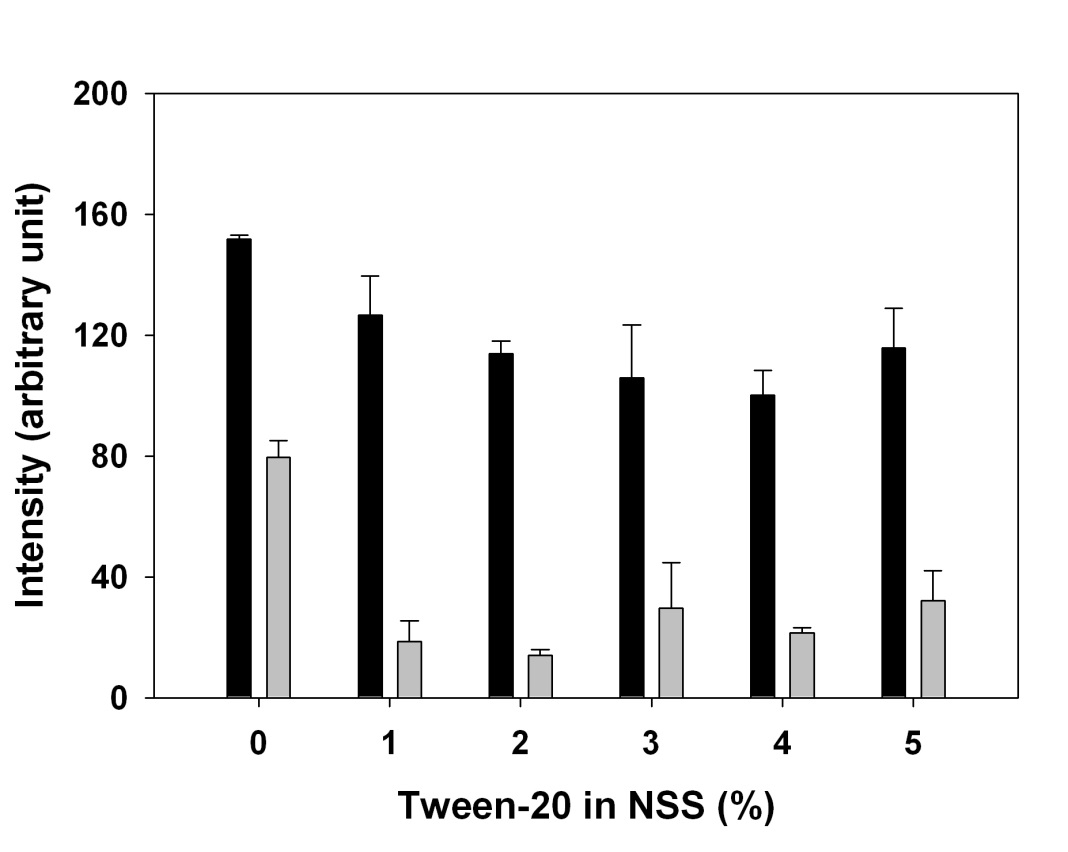
**A simple and low-cost portable paper-based ABO blood typing device for point-of-care testing**

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**Supplementary data**

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**Fig. S1** Type of filter paper for fabrication of PADs; ■ agglutinated RBCs (positive result); ■ non-agglutinated RBCs (negative result)

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**Fig. S2** Effect of Tween-20 in elution solution; ■ agglutinated RBCs (positive result); ■ non-agglutinated RBCs (negative result)

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| --- | --- | --- | --- | --- | --- |
| **TABLE S1** Effect of hematocrit on blood typing by the ABO blood typing device | | | | | |
| **Blood sample** | **Number of samples (n)** | **Hematocrit range tested (%)** | **Interpretation** | | |
| **False negative hematocrit range (%)** | **Valid hematocrit range (%)** | **False positive hematocrit range (%)** |
|  |  |  |  |  |  |
| Group A | 24 | 23–60 | - | 23–45 | ≥ 46 |
| Group B | 22 | 23–54 | - | 23–45 | ≥ 46 |
| Group AB | 18 | 21–59 | ≤ 23 | 24–59 | - |
| Group O | 25 | 21–52 | - | 21–43 | ≥ 44 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TABLE S2** Precision of blood typing by the portable paper-based ABO blood typing device | | | | | |
| **Pooled blood sample** | **Blood typing result by PAD** | | | | **Precision (%)** |
| **Group A** | **Group B** | **Group AB** | **Group O** |
|  |  |  |  |  |  |
| Group A | 20 | 0 | 0 | 0 | 100 |
| Group B | 0 | 20 | 0 | 0 | 100 |
| Group AB | 0 | 0 | 20 | 0 | 100 |
| Group O | 0 | 0 | 0 | 20 | 100 |