

# Jordan University of Science and Technology

## Intracellular nitric oxide measurement in human sperm using 4,5-diaminofluorescein-2-diacetate and flow cytometry

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**Abstract:** Nitric oxide (NO) has a major contribution in male reproduction, especially in sperm motility. Methods for direct measurement of NO in single cell such as spermatozoa are complex, lack sensitivity, and are non-specific. The objective of this study was to standardize the measurement of intracellular nitric oxide in human spermatozoa using NO specific probe 4,5-diaminofluorescein-2-diacetate (DAF-2DA) and flow cytometry.