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| **Title** | **Perform laboratory centrifugation techniques** | | |
| **Level** | **4** | **Credits** | **1** |

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| **Purpose** | People credited with this unit standard are able to: perform differential centrifugation; and density gradient centrifugation. |

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| **Classification** | Science > Biochemistry |

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| **Available grade** | Achieved |

**Guidance Information**

1 All work must be carried out in accordance with the quality management system, documented protocol system or Standard Operating Procedures (SOP) typically acceptable in a commercial or research laboratory.

2 Health and Safety practices must conform to Australian/New Zealand Standard AS/NZS 2243 – *Safety in Laboratories* Parts 1, 2, 3, 7 and 10 available at http://www.standards.co.nz and http://infostore.saiglobal.com/store.

3 Underpinning knowledge includes protection from aerosols, corrosive materials, bio-hazardous materials, unbalanced tubes.

4 Glossary
*Laboratory procedures* refer to documented systems or processes of operation which may be found in a SOP manual, quality management system, or in protocol system documentation. These procedures are external and/or internal laboratory requirements governing laboratory work.

## Outcomes and performance criteria

### Outcome 1

Perform differential centrifugation.

**Performance criteria**

1.1 Separation is achieved that is consistent with the sample.

1.2 Separation is carried out in accordance with laboratory procedures and manufacturers' instructions.

1.3 Log of operation is maintained in accordance with laboratory procedures and manufacturers' instructions.


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**Outcome 2**

Perform density gradient centrifugation.

Range one of – step, continuous.

**Performance criteria**

2.1 The equipment and conditions selected are appropriate to the sample.

Range rotor, tubes, revolutions per minute (rpm), gravitational force (G force), time.

2.2 Density gradient is prepared to the characteristics of the sample.

2.3 Separation is achieved that is consistent with the sample.

Range one of – density of sample is measured, sample is successfully retrieved.

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| **Planned review date** | 31 December 2023 |

**Status information and last date for assessment for superseded versions**

| Process | Version | Date | Last Date for Assessment |
|---|---|---|---|
| Registration | 1 | 22 December 1996 | 31 December 2014 |
| Review | 2 | 23 November 1999 | 31 December 2014 |
| Review | 3 | 17 September 2010 | N/A |
| Rollover | 4 | 27 January 2015 | N/A |
| Review | 5 | 27 September 2018 | N/A |

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|---|---|
| **Consent and Moderation Requirements (CMR) reference** | 0113 |

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

**Comments on this unit standard**

Please contact NZQA National Qualifications Services nqs@nzqa.govt.nz if you wish to suggest changes to the content of this unit standard.


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