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## **Doublecortin-like knockdown in the adult mouse brain: implications for neurogenesis, neuroplasticity and behaviour**

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**Dirk-Jan Saaltink**

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# **Doublecortin-like knockdown in the adult mouse brain**

*implications for neurogenesis, neuroplasticity and behaviour*

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Voor Isabel, Olivia & Liselot





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## List of abbreviations

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|          |                                     |
|----------|-------------------------------------|
| ADX      | adrenalectomy                       |
| ARC      | Arcuate nucleus                     |
| AVP      | arginine vasopressin                |
| BrdU     | Bromodeoxyuridine                   |
| CARP     | CaMK-related peptide                |
| CFC      | Contextual Fear Conditioning        |
| CHB      | Circular Hole Board                 |
| D2       | Deiodinase 2                        |
| D3       | Deiodinase 3                        |
| DCL      | Doublecortin-like                   |
| DCLK     | Doublecortin-like kinase            |
| DCX      | Doublecortin                        |
| DG       | Dentate gyrus                       |
| dox      | Doxycycline                         |
| EC       | Entorhinal cortex                   |
| GC       | Granule cell                        |
| GCL      | Granule cell layer                  |
| GFAP     | Glial fibrillary acidic protein     |
| GR       | Glucocorticoid Receptor             |
| HPA-axis | Hypothalamic pituitary adrenal axis |
| HPT-axis | Hypothalamic pituitary thyroid axis |
| ICj      | Islands of Calleja                  |
| KD       | Knockdown                           |
| MAP      | Microtubules associated protein     |
| ME       | Median Eminence                     |
| ML       | Molecular layer                     |
| MR       | Mineralocorticoid receptor          |
| mRNA     | Messenger RNA                       |
| NPC      | Neuronal progenitor cell            |
| NPY      | Neuropeptide Y                      |
| NSC      | Neuronal stem cell                  |
| OB       | Olfactory bulb                      |
| PE       | Periventricular area                |
| PGC      | Periglomerular cell                 |
| PVN      | Paraventricular nucleus             |
| RG       | Radial glia                         |
| RMS      | Rostral migratory stream            |

## List of abbreviations

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|       |                             |
|-------|-----------------------------|
| SCN   | Suprachiasmatic nucleus     |
| SGZ   | Subgranular zone            |
| shRNA | Short hairpin RNA           |
| siRNA | Short interference RNA      |
| SVZ   | Subventricular zone         |
| TRH   | Thyroid Releasing Hormone   |
| TSH   | Thyroid Stimulating Hormone |

Nomenclature of the brain regions depicted in figures and text was based on the atlas of Paxinos and Franklin (Paxinos and Franklin, 2001).

