



## Lexicon Genetics Incorporated – Genentech Project Materials

|                               |                                     |                               |                                                        |
|-------------------------------|-------------------------------------|-------------------------------|--------------------------------------------------------|
| <b>Genentech ID:</b>          | UNQ483                              | <b>Date of Submission:</b>    | 10.21.04                                               |
| <b>Lexicon Contract Name:</b> | DNA373                              | <b>Mutation Type:</b>         | <input checked="" type="checkbox"/> Standard Knock out |
| <b>LexVision Name:</b>        | SEC571N1                            |                               | <input type="checkbox"/> Conditional                   |
| <b>Reference accessions:</b>  | ENSMUSESTT00000012916;<br>XM_149891 | <b>Is this gene X-linked?</b> | No                                                     |

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**Required Materials:**

- x pKOS clone DNA(s)    \_\_\_KOS 6\_\_\_\_\_
- x Target Vector DNA    \_\_\_TV6-1\_\_\_\_\_
- x Targeted ES Cell DNA    \_\_\_2G10\_\_\_\_\_
- x Genomic Map

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### Southern Blot Analysis: *External/Internal Probe Strategies*

|                                        | <u><b>5' External</b></u>      | <u><b>3' External</b></u>     |
|----------------------------------------|--------------------------------|-------------------------------|
| Name of Probe:                         | <b>18+19</b>                   | <b>24+25</b>                  |
| Restriction Enzyme for Genomic Digest: | <b>Bgl II</b>                  | <b>Bgl I</b>                  |
| Predicted Wild-type Band (kb):         | <b>10.9 (running ~1kb low)</b> | <b>9.1 (running ~1kb low)</b> |
| Predicted Mutant Band (kb):            | <b>16.5 (running ~1kb low)</b> | <b>7.7 (running ~1kb low)</b> |
| Probe Size:                            | <b>286 bp</b>                  | <b>286 bp</b>                 |

**PCR Strategies:**

*For standard knockouts, give wildtype and mutant-specific strategies*

*For conditionals, give 5' loxP and cre-excision strategies*

| Wild type-specific (absent in targeted allele) |        | Mutation-specific product (absent in wt) |        |
|------------------------------------------------|--------|------------------------------------------|--------|
| 5' Primer Name:                                | -26    | 5' Primer Name:                          | Neo3a  |
| 3' Primer Name:                                | -27    | 3' Primer Name:                          | -14    |
| Predicted Wild-type Band (bp):                 | 570 bp | Predicted Wild-type Band (bp):           | none   |
| Predicted mutant band (bp)                     | none   | Predicted mutant band (bp)               | 377 bp |

| 5' loxP strategy               |  | Distinguish Cre-excised and wt |  |
|--------------------------------|--|--------------------------------|--|
| 5' Primer Name:                |  | 5' Primer Name:                |  |
| 3' Primer Name:                |  | 3' Primer Name:                |  |
| Predicted Wild-type Band (bp): |  | Predicted Wild-type Band (bp): |  |
| Predicted mutant band (bp)     |  | Predicted mutant band (bp)     |  |

**Primer sequences:****Southern probes**

DNA373- 18    5' – ATGGAAGAACCTTTGCCACC  
DNA373- 19    5' – GCTCTGTGTGCCTTGGCACTTTTG  
DNA373- 24    5' – ATCTAAGGAGATGGGGTTTCATC  
DNA373- 25    5' – ATGTGAGATTCATATCCCGTGAC

**PCR Genotyping**

DNA373- 26    5' – CGTATTTTCAGGCCAGAGTGCC  
DNA373- 27    5' – GGTGAGATCCGATGGGTGAC  
DNA373- 14    5' – GGTGATAATGCTGATAGCCAATTC  
Neo3a            5' – GCAGCGCATCGCCTTCTATC

[illegible]

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[illegible]

### Selection Cassette: LacZ/Neo

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### **Targeted Locus:**

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