

PROTEOMICS

Supporting Information for Proteomics

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Michael Specht, Mario Stanke, Mia Terashima, Bianca Naumann-Busch, Ingrid Janßen, Ricarda Höhner, Erik F. Y. Hom, Chun Liang
and, Michael Hippler

**Concerted action of the new Genomic Peptide Finder
and AUGUSTUS allows for automated proteogenomic annotation of the
Chlamydomonas reinhardtii genome**

GPF *Chlamydomonas reinhardtii* annotation impact

1. New gene (3 cases)
2. Gene split (1 case)
3. Gene merge (1 case)
4. Gene extension (43 cases)
5. Gene truncation (2 cases)
6. Gene internal adjustments (added exons) (6 cases)
7. Gene internal adjustments (miscellaneous) (8 cases)
8. Gene internal adjustments (removed exons) (4 cases)

New gene (3 cases)

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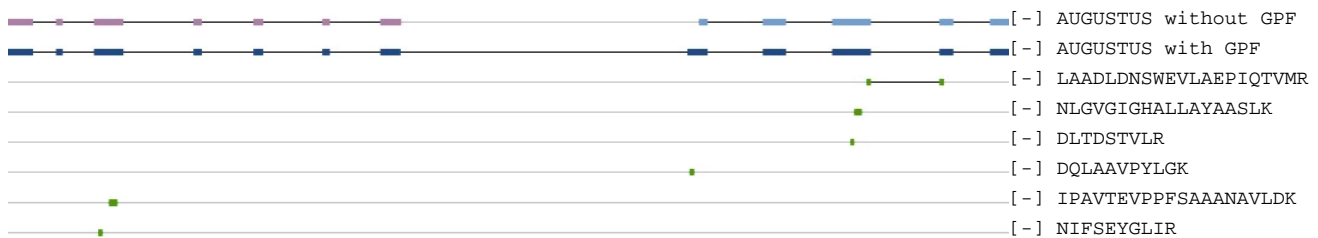
Gene split (1 case)

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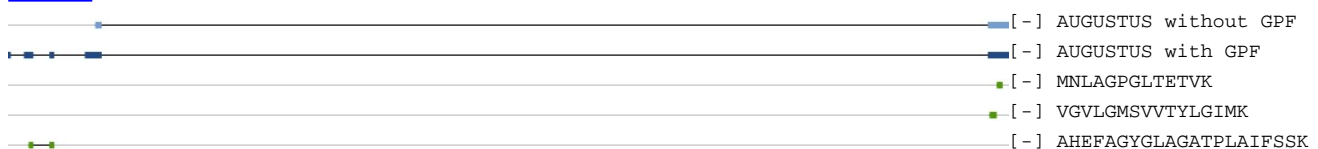
Gene merge (1 case)

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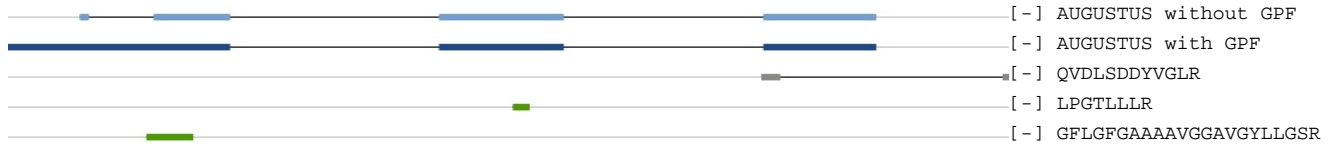


Gene extension (43 cases)

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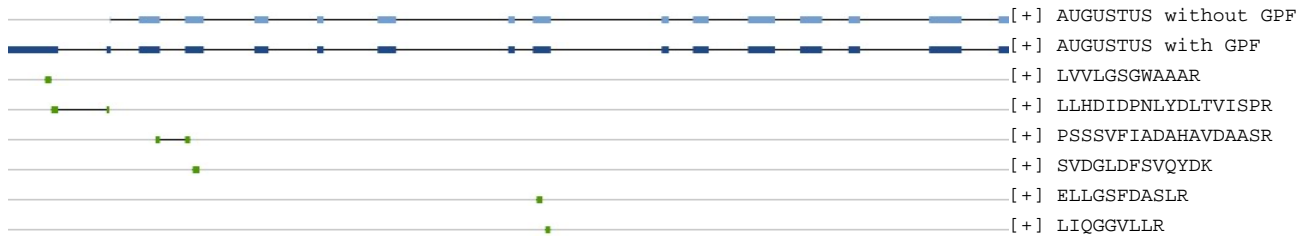
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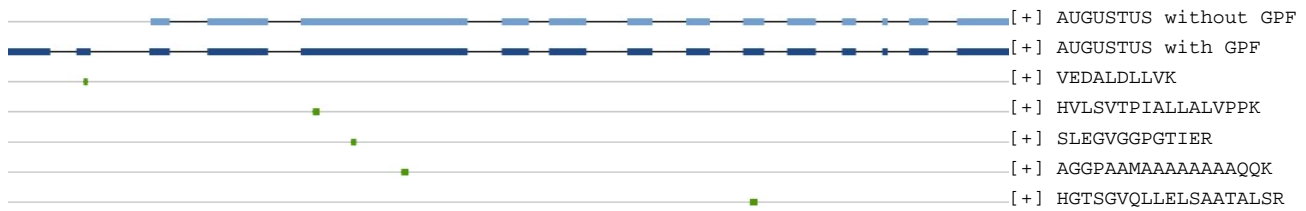
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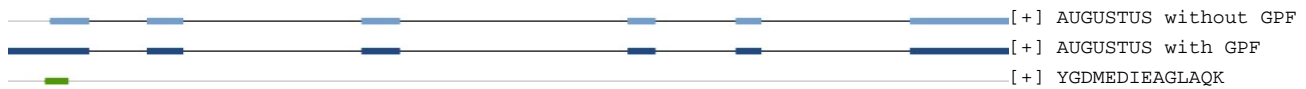
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[-] SAEAGQAVIDSIR
[-] TTAEQAIAGIDVK

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[-] AUGUSTUS without GPF
[-] AUGUSTUS with GPF
[-] SAGWSIVNTPAGEVVGLPK
[-] LEGATLEQYLSEK
[-] DLLGGIPGFYESVR
[-] VVQLANALETSR
[-] SWSLDANVTLLR
[-] LPQLEAYVDEQVANR

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[+] AUGUSTUS without GPF
[+] AUGUSTUS with GPF
[+] VAAEDTVDAGIR

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[-] AUGUSTUS without GPF
[-] AUGUSTUS with GPF
[-] VTLSADDLAALVDK

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[+] AUGUSTUS without GPF
[+] AUGUSTUS with GPF
[+] GSYHNLAALVEGGLQEVQPSPLSGLGR
[+] LIIVSNHLPLR
[+] YLDGFSWDEFK
[+] VNPWSVESTADGIYAAIK
[+] APFYLNDPVEVLQLLAR

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[+] AUGUSTUS without GPF
[+] AUGUSTUS with GPF
[+] PNAGDAAAQQAFSDVR
[+] DLEEQLTTATR

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[-] AUGUSTUS without GPF
[-] AUGUSTUS with GPF
[-] ADAPSDQLDTAMLR

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[+] AUGUSTUS without GPF
[+] AUGUSTUS with GPF
[+] EDSLEDIDMAVLR

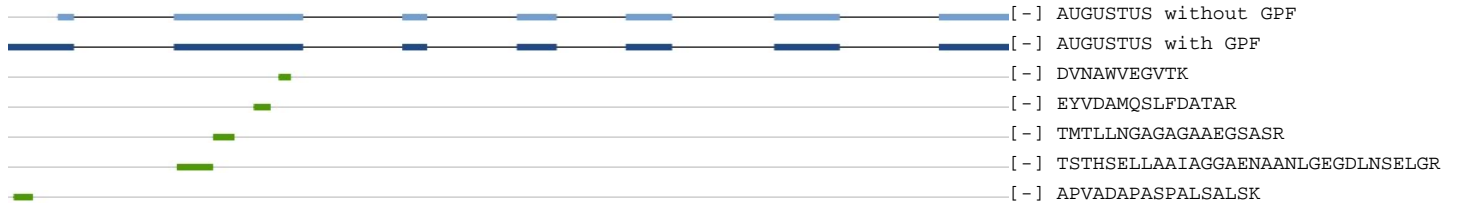
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[-] AUGUSTUS without GPF
[-] AUGUSTUS with GPF
[-] ISGSDLVENLALDQR
[-] SPEELNDPAQIGATGSASQR

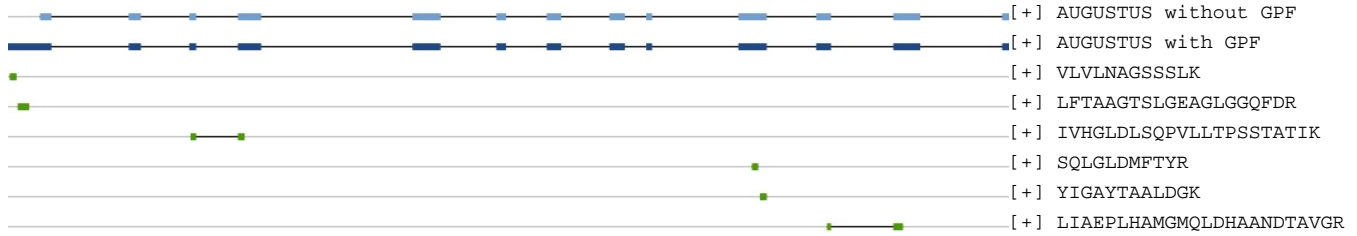
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[+] AUGUSTUS without GPF
[+] AUGUSTUS with GPF
[+] SHGGVNEEEAVEAAER
[+] LLVEAGLGHLFFR

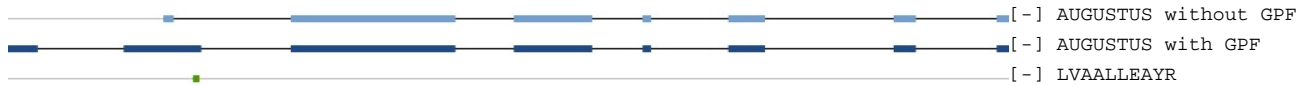
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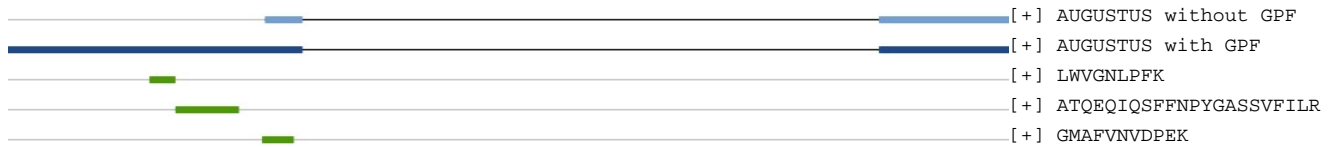
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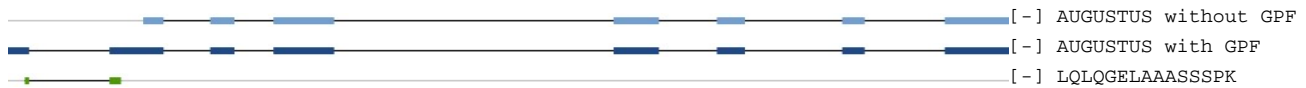
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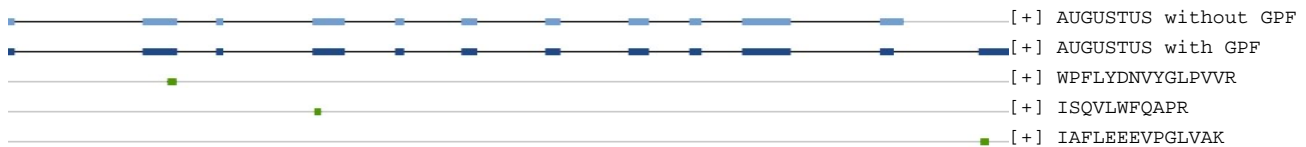
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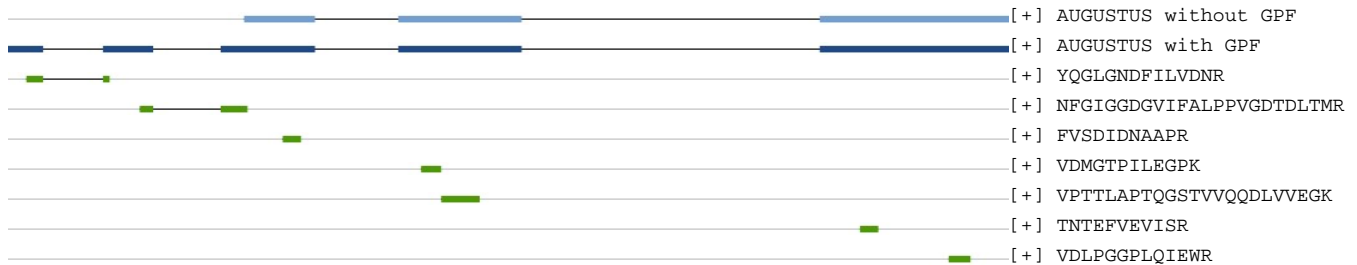
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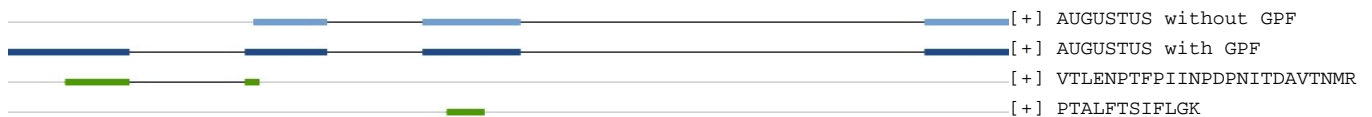
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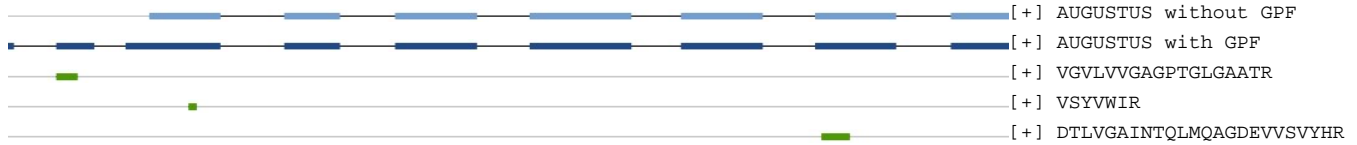
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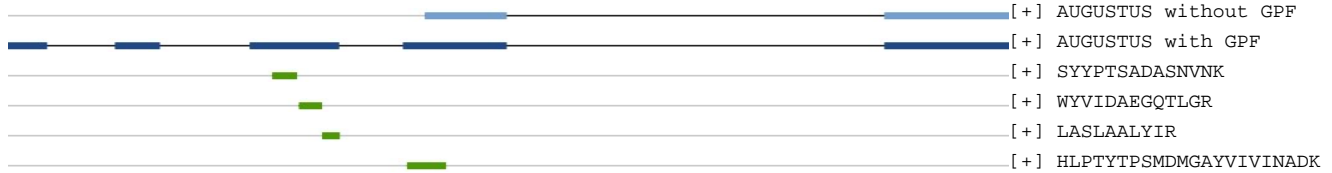
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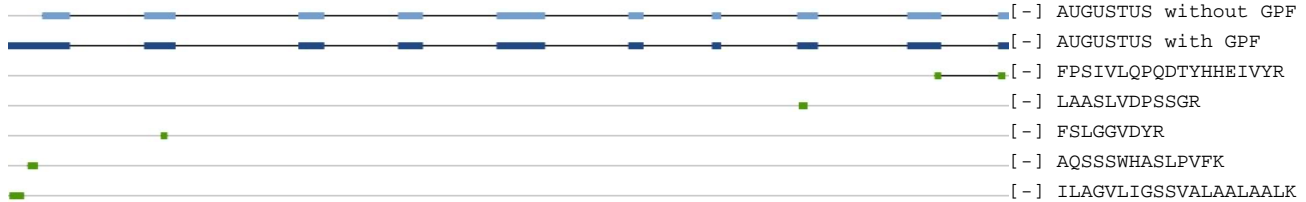
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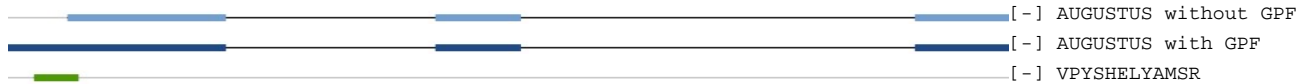
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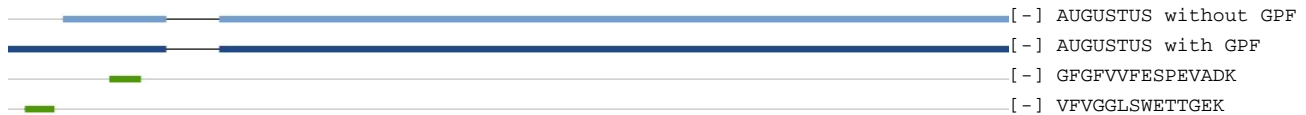
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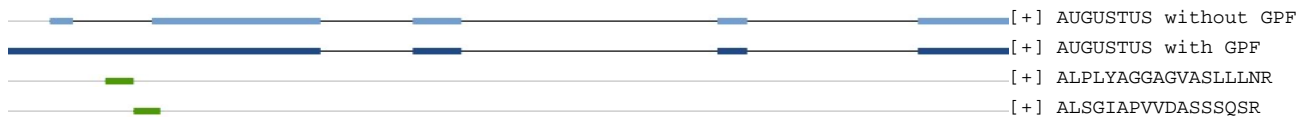
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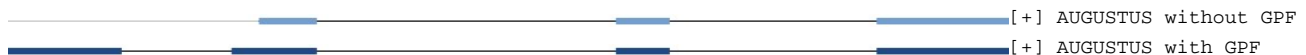
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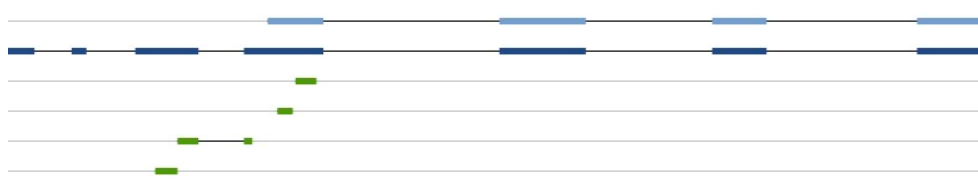


 [+] EWQDFLDVAEK

 [+] TMYDDYAANAEEPIIYK

 [+] DPSELQAAATSVEAR

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 [-] AUGUSTUS without GPF

 [-] AUGUSTUS with GPF

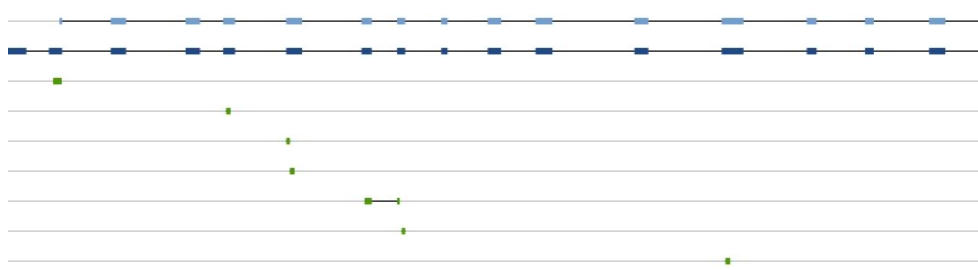
 [-] SGSYSL SINAAVEK

 [-] SLGLAAYAVGK

 [-] AVLANPQVPAAGSLDVLSVK

 [-] GADGSAISTLTGTYPK

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 [+] AUGUSTUS without GPF

 [+] AUGUSTUS with GPF

 [+] GAGTSFTSPGWLTQLNMLWGGK

 [+] GFAISGGDAWK

 [+] AYLEAMLDLDR

 [+] VFGASSLFAADK

 [+] SVFNDFNSLTSDSPVIQAVYTALK

 [+] ATDLLPLWK

 [+] LSPTMADYQQLR

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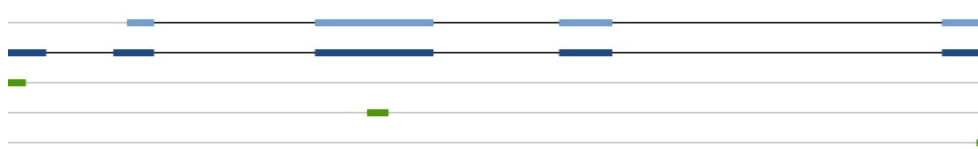


 [+] AUGUSTUS without GPF

 [+] AUGUSTUS with GPF

 [+] FAAMGDQFR

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 [+] AUGUSTUS without GPF

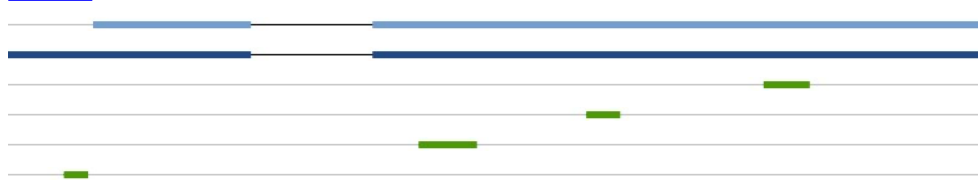
 [+] AUGUSTUS with GPF

 [+] MMEFITETYK

 [+] TGEVVFNLDGR

 [+] YALIGVLGLLVLTK

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 [-] AUGUSTUS without GPF

 [-] AUGUSTUS with GPF

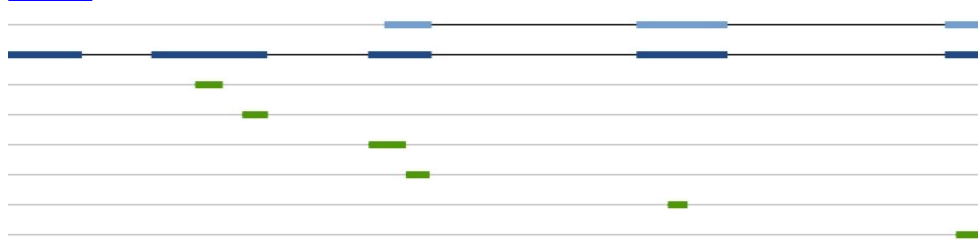
 [-] TNNELPPSDQIITAQPDIR

 [-] FGNELFVANAGDSR

 [-] ESNEDEGE GGGVSTTDALDLR

 [-] FGGAMQWR

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 [+] AUGUSTUS without GPF

 [+] AUGUSTUS with GPF

 [+] GVDVSVSAGAGSAK

 [+] VAASSLVLQDVSRL

 [+] ISTAHSAFMNYLLTLTHER

 [+] YSVLATWPDFTK

 [+] FYSMVDFEHR

 [+] HNTVHPALGPATADGAVVQFLLAHAK

Gene truncation (2 cases)

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 [+] AUGUSTUS without GPF

 [+] AUGUSTUS with GPF

 [+] ADGGAGAAQLLETGTAAK

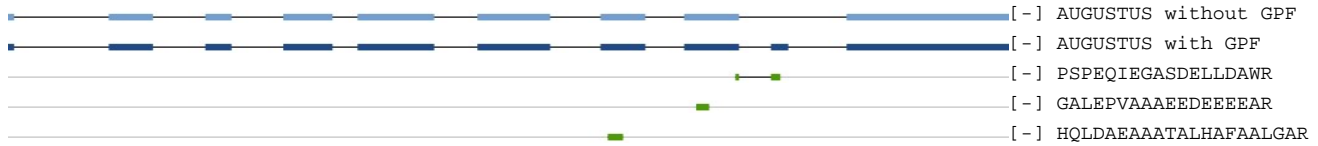
 [+] LVEEAVEAEGAER

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Gene internal adjustments (added exons) (6 cases)

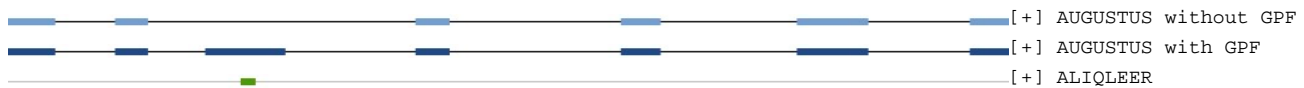
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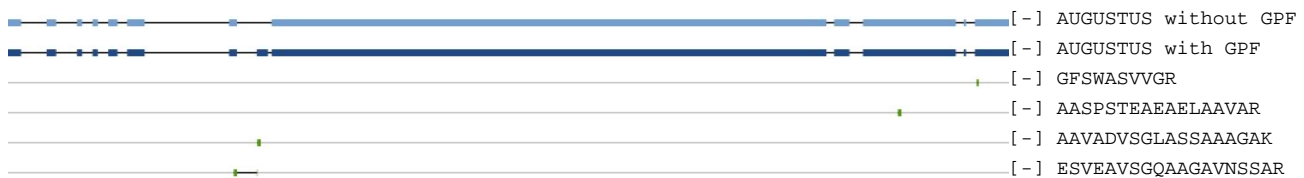
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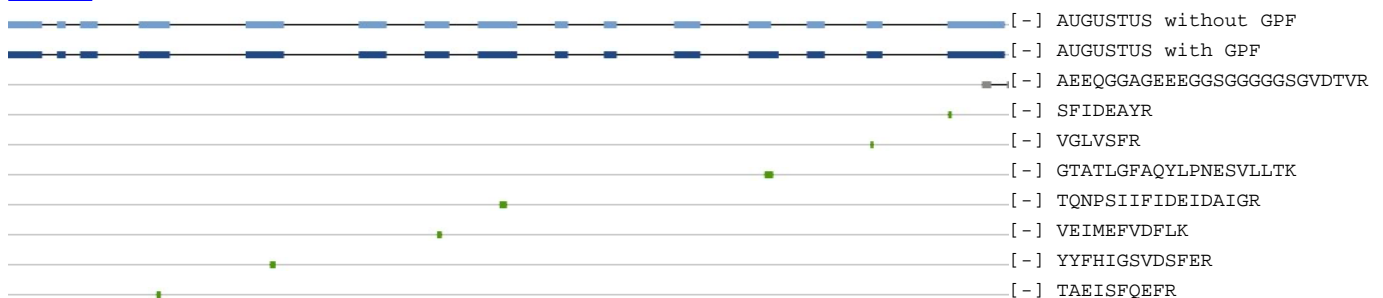


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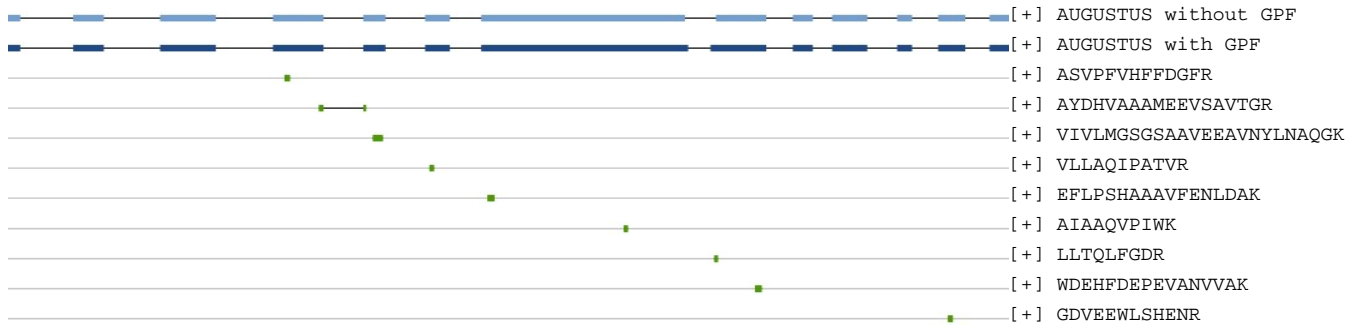


Gene internal adjustments (miscellaneous) (8 cases)

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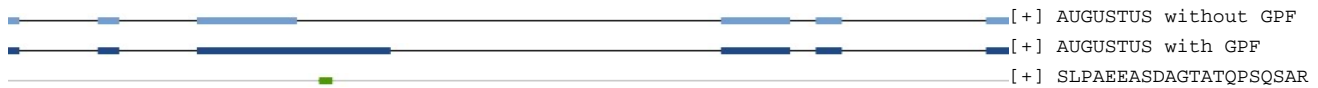
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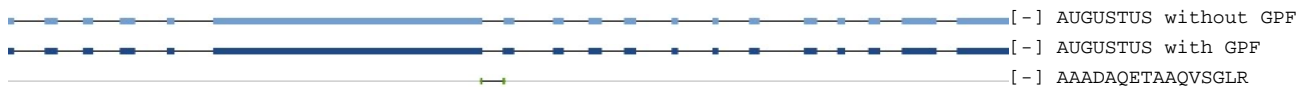
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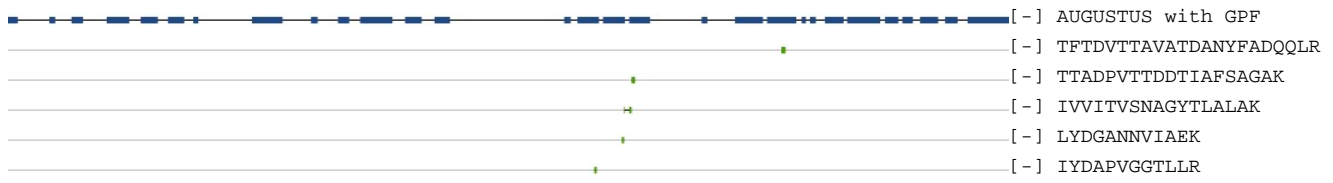
Gene internal adjustments (removed exons) (4 cases)

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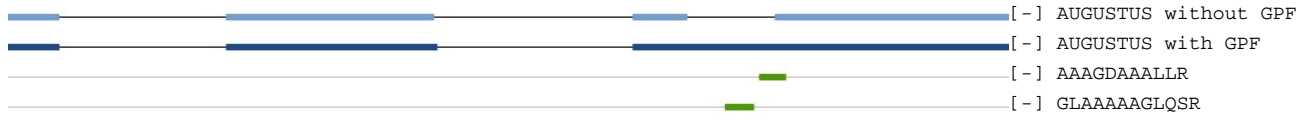


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