20 40 60 80 100 120

 '''''''''|'''''''''|'''''''''|'''''''''|'''''''''|'''''''''|'''''''''|'''''''''|'''''''''|'''''''''|'''''''''|'''''''''|

 ROI\_00014\_iTzDak19-1 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00001\_iTzDak19-2 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00006\_iTzDak19-2 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00013\_iTzDak19-3 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00018\_iTzDak19-3 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00007\_iTzLuk21-3 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00012\_iTzLuk21-3 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00013\_iTzLuk21-1 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00018\_iTzLuk21-1 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00005\_iTzLuk21-4 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00006\_iTzLuk21-4 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00006\_iTzLuk21-5 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00011\_iTzLuk21-5 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00013\_iTzLuk21-2 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 ROI\_00018\_iTzLuk21-2 SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 Tal3a\_PXO99A SIVAQLSRPDPALAALTNDHLVALACLGGRPALDAVKKGLPHAPELIRRVNSRIGERTSHRVADLAHVVRVLGFFQSHSHPAQAFDDAMTQFGMSRHGLVQLFRRVGVTEFEARCGTIPP 120

 Tal3b\_PXO99A SIVAQLSRRDPALAALTNDQLVALACLGGRPAPHSRKRKSHD------------------------------------------------------------------------------ 42

 PthXo1\_PXO99A SIVAQLSRPDPALAALTNDHLVALACLGGRPAMDAVKKGLPHAPELIRRVNRRIGERTSHRVADYAQVVRVLEFFQCHSHPAYAFDEAMTQFGMSRNGLVQLFRRVGVTELEARGGTLPP 120

 Consensus SIVAQLSRXDPALAALTNDXLVALACLGGRPAXXXXKXXXXXAPELIRRVNXRIGERTSHRVADXAXVVRVLXFFQXHSHPAXAFDXAMTQFGMSRXGLVQLFRRVGVTEXEARXGTJPP 120

 140 160 180 200 220 240

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 ROI\_00014\_iTzDak19-1 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00001\_iTzDak19-2 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00006\_iTzDak19-2 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00013\_iTzDak19-3 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00018\_iTzDak19-3 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00007\_iTzLuk21-3 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00012\_iTzLuk21-3 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00013\_iTzLuk21-1 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00018\_iTzLuk21-1 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00005\_iTzLuk21-4 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00006\_iTzLuk21-4 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00006\_iTzLuk21-5 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00011\_iTzLuk21-5 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00013\_iTzLuk21-2 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 ROI\_00018\_iTzLuk21-2 ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 Tal3a\_PXO99A ASQRWDRILQASGTKRAKPSPTSAQTPDQASLHAFPDSLERDLDAPSPMHEGDQTRASRRKRS--------------------------------------------------------- 183

 Tal3b\_PXO99A ------------------------------------------------------------------------------------------------------------------------ 42

 PthXo1\_PXO99A ASQRWDRILQASGMKRAKPSPTSAQTPDQASLHAFADSLERDLDAPSPMHEGDQTGASSRKRSRSDRAVTGPSAQHSFEVRVPEQRDALHLPLSWRVKRPRTRIGGGLPDPGTPIAADLA 240

 Consensus ASQRWDRILQASGXKRAKPSPTSAQTPDQASLHAFXDSLERDLDAPSPMHEGDQTXASXRKRSRSDRAVTGPSAQHSFEVRVPEQRDALHLPLSWRVKRPRTRIGGGLPDPGTPIAADLA 240

 260 280

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 ROI\_00014\_iTzDak19-1 ---------------------------------------------- 183

 ROI\_00001\_iTzDak19-2 ---------------------------------------------- 183

 ROI\_00006\_iTzDak19-2 ---------------------------------------------- 183

 ROI\_00013\_iTzDak19-3 ---------------------------------------------- 183

 ROI\_00018\_iTzDak19-3 ---------------------------------------------- 183

 ROI\_00007\_iTzLuk21-3 ---------------------------------------------- 183

 ROI\_00012\_iTzLuk21-3 ---------------------------------------------- 183

 ROI\_00013\_iTzLuk21-1 ---------------------------------------------- 183

 ROI\_00018\_iTzLuk21-1 ---------------------------------------------- 183

 ROI\_00005\_iTzLuk21-4 ---------------------------------------------- 183

 ROI\_00006\_iTzLuk21-4 ---------------------------------------------- 183

 ROI\_00006\_iTzLuk21-5 ---------------------------------------------- 183

 ROI\_00011\_iTzLuk21-5 ---------------------------------------------- 183

 ROI\_00013\_iTzLuk21-2 ---------------------------------------------- 183

 ROI\_00018\_iTzLuk21-2 ---------------------------------------------- 183

 Tal3a\_PXO99A ---------------------------------------------- 183

 Tal3b\_PXO99A ---------------------------------------------- 42

 PthXo1\_PXO99A ASSTVMWEQDAAPFAGAADDFPAFNEEELAWLMELLPQSGSVGGTI 286

 Consensus ASSTVMWEQDAAPFAGAADDFPAFNEEELAWLMELLPQSGSVGGTI 286