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# Molecular characterisation of the signaling molecules TCRζ and ZAP-70 in the marsupial *Macropus eugenii* (tammar wallaby)

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atgcaattcctttccacagaggcccagagttttggactggcagacccaagactgtgctacctt
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taaagaacgagtggatttaaagttgcaagaatatcctgattccttttataccccgtgaaaac
ccacaatcgcactctgcagcttcatttctggcttgtgattattgtctttataagtacgatggc
ctttaggaagcagagaaactttctcatagctcacgccgtcagtatctctatttcagtgtaatt
cga

**Figure S1.** ***Macropus eugenii*** **TCRζ chain nucleotide sequence – raw data.**

MQFLSTEAQSFGLADPRLCYLLDGILFIYGVIITALFLRAKFSKTAKISSYQQDQNQLYNELS
PGRREEYDILDKRRGRDPEMGGKQRRKNPTESVYNALQKDKMADAYSEIGMKGENQRRRGKGN
DVLYQGLSPATKDTYDALHMQPLPPR

**Figure S2.** ***Macropus eugenii*** **TCRζ chain putative amino acid sequence.**

5′ end
aatttgtctctcgtgggggggccgggacgttatttcctctttttggcccccctagctacactc
ctttttagatcgacagtaaacagattcgttgacagagggtggtagctagagccagtggtggct
gggcctagaccctgtccgctaactgccttccccaccctgagaccctggaacccagggtagcct
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gttccttgggcctagcgcctccggaacctccacaggaccatttctccttgtgggaaggaactg
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gagtccacg
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gagcacctgaagctggcaggcatggcggatgggcttttcctgctccgccagtgcctccgtagt
ttgggggggtatgtgctctcattggtatacgacctgcacatccatcattaccccatcgagcgt
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3′ end
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ctcccaactttgaggtggatgatgcacataaagataggcctattccagcctccattgtcttaa
ataccccccggtttcaaaaacctgttactcctatctgaaaattaccgtcggccgtcattaat

**Figure S3.** ***Macropus eugenii*** **ZAP-70 nucleotide sequence.**

MPDAAAHLPFFYGSISRAEAEEHLKLAGMADGLFLLRQCLRSLGGYVLSLVYDLHIHHYPIER
QLNGTYAIAGGKPHCGPAELCEFYSKDADGLPCALRKPCNRPSGMEPQPGVFDSFRDSMVRDY
VRQTWKLEGDALEQAIISQAPQVEKLIATTAHERMPWYHSSISREEAKRKLYSGSQHDGKFLL
KPRKEQGSYALSLINGKTVYHYLINQDKSGKYCIPEGTKFDTLWQLVKYLKLKANGLIYCLKE
ICPNASASTATVTAAPTLPVHPSMPRRNDTLNSDGYTPEPACLNKSQGEKSRVLPMDTSVYES
PYSDPEELKDKKLFLKRENLMIDEVELGSGNFGCVRKGVYKMRKKQIDVAIKVLKSTNEKAEK
DEMMKEAQIMHLLDNPYIVRIIGVCKAEALMLVMEMAIAGPLHKFLAAKKEEVPVSNVVELLH
QVAMGMKYLEEKNFVHRDLAARNVLLVNQHYAKISDFGLSKALGADDSYYTARSAGKWPLKWY
APECINYRKFSCQSDVWTYGFTMWKPFTYGQNPYKKMKGPEVLKFIEKGKRMDPPPECPPNMY
TLMKKCWIYKWEHRPNFPYVEQPIKTYYYRLASKAEKVLYAPQSEGATPA

**Figure S4.** ***Macropus eugenii*** **ZAP-70 putative amino acid sequence.**

**Table S1. Genbank Accession numbers for TCRζ**

| Species name | Common Name | Accession Number |
|---|---|---|
| *Anolis carolinensis* | Green anole | XM_003219127.1 |
| *Aotus nancymaae* | Ma's night monkey | EF656481.1 |
| *Bos taurus* | Cattle | NM_174012.2 |
| *Bubalus bubalis* | Water buffolo | DQ057984.1 |
| *Canis lupus familiaris* | Dog | XM_849255.2 |
| *Cavia porcellus* | Domestic Guinea Pig | XM_003468676.1 |
| *Cercocebus torquatus* | Red-crowned mangaby (variant 2) | DQ437666.1 |
| *Cercocebus torquatus* | Red-crowned mangaby (variant 1) | DQ437665.1 |
| *Cricetulus griseus* | Chinese hamster | XM_003502297.1 |
| *Equus caballus* | Horse | XM_003364910.1<br>DQ885232.1 |
| *Gallus gallus* | Chicken | NM_206879.1 |
| *Homo sapiens* | Human (variant 2) | NM_000734.3 |
| *Homo sapiens* | Human (variant 1) | J04132.1 |
| *Loxodonta africana* | African elephant | XM_003415037.1 |
| *Macaca fascicularis* | Crab-eating macaque (variant 2) | DQ437668.1 |
| *Macaca fascicularis* | Crab-eating macaque (variant 1) | DQ437667.1 |
| *Macaca mulatta* | Rhesus monkey (variant 2) | NM_001077423.1 |
| *Macaca mulatta* | Rhesus monkey (variant 1) | DQ437669.1 |
| *Macropus eugenii* | Tammar wallaby | KF887946 |
| *Meleagris gallopavo* | Turkey | XM_003202846.1 |
| *Monodelphis domestica* | Gray short-tailed opossum | XM_001371336.1 |
| *Mus musculus* | Mouse | NM_001113391.1<br>M19729 |
| *Nomascus leucogenys* | Northern white-cheeked gibbon | XM_003258814 |
| *Oryctolagus cuniculus* | Rabbit | NM_001082002.1<br>AB035152.1 |
| *Ovis aries* | Sheep | NM_001009417.1 |
| *Pan troglodytes* | Chimpanzee (variant 2) | XM_001174745.1 |
| *Pan troglodytes* | Chimpanzee (variant 1) | XM_001174731.1 |
| *Pan troglodytes* | Chimpanzee | XM_001174731.2 |
| *Papio anubis* | Olive Baboon (variant 2) | DQ437664.1 |
| *Papio anubis* | Olive Baboon (variant 1) | NM_001112652.1 |
| *Pongo abelii* | Sumatran Orangutan | XM_002809835.1 |
| *Rattus norvegicus* | Norwegian (Brown) Rat | NM_170789.1<br>L08447 |
| *Sus scrofa* | Pig | AF153830.1 |

**Table S2. Genbank Accession numbers for ZAP-70**

| Species Name | Common Name | Accession Numbers |
|---|---|---|
| *Ailuropoda melnaoleuca* | Giant Panda | XM_002912427.1 |
| *Bos taurus* | Cattle | XM_865562 |
| *Callithrix jacchus* | Common marmoset | XM_002757393.1 |
| *Canis lupus familiaris* | Dog | XM_003431497.1 |
| *Cricetulus griseus* | Chinese hamster | XM_003498289.1 |
| *Danio rerio* | Zebrafish | NM_001020589 |
| *Equus caballus* | Horse | XM_001488128 |
| *Gallus gallus* | Chicken | XM_418206.2 |
| *Hippoglossus hippoglossus* | Atlantic halibut | GU985452.1 |
| *Homo sapiens* | Human | NM_001079 |
| *Loxodonta africana* | African elephant | XM_003422028.1 |
| *Macaca mulatta* | Rhesus monkey | XM_001101293 |
| *Macropus eugenii* | Tammar wallaby | KF887945 |
| *Meleagris gallopavo* | Turkey | XM_003213184.1 |
| *Monodelphis domestica* | Gray short tailed opossum | XM_001376170 |
| *Mus musculus* | Mouse | NM_009539<br>U77667.1<br>U4379 |
| *Nomascus leucogenys* | White-cheeked gibbon | XM_003279222.1 |
| *Oreochromis niloticus* | Nile tilapia | XM_003445128.1 |
| *Ornithorhynchus anatinus* | Platypus | XM_001515221 |
| *Oryctolagus cuniculus* | Rabbit | XM_002710002.1 |
| *Pan troglodytes* | Chimpanzee | XM_515637.3 |
| *Pongo abelii* | Sumatran Orangutan | XM_002811671.1 |
| *Rattus norvegicus* | Norway Rat | NM_001012002 |
| *Sus scrofa* | Pig | XM_003481152.1 |
| *Taeniopygia guttata* | Zebra finch | XM_002191899 |
| *Xenopus laevis* | African clawed frog | NM_001093536 |
| *Xenopus tropicalis* | Silurana tropiclais | NM_001006824 |