

Strain Name: B6.129P2-*Hprt1*^{tm24(Ple56-EGFP/NLS)*Ems*} (DDC-A)

Chimeras were generated using mEMS2475, mEMS2478*, mEMS2479, and mEMS2482

* Strain has gone germline

Strain Detail

Type: Pleiades Promoter Project MiniPromoter Strain
Mating System: Pleiades Promoter Project MiniPromoter Strain
Mating System: Heterozygote x Inbred (F N1 x M - current breeding system)
 Inbred x Hemizygote (F x M N2+ - future)
Species: laboratory mouse
Investigator: Elizabeth M. Simpson, CMMT, UBC
Generation: N2 hemizygous male (9-June-09)

Appearance

black

Related Genotype: *a/a*

Strain Description

This transgenic mouse strain has an ‘enhanced’ GFP (EGFP) under the control of the Ple56 MiniPromoter. Please refer to MiniPromoter design construct file for further information.

Strain Development

pEMS1125 was electroporated into mEMS1204 (B6129F1-*Gt(ROSA)26Sor*^{tm1Sor/+}, *Hprt1*^{b-m3/Y}) embryonic stem cells (ESCs), and positive constructs were microinjected into ICRBAF1 (F1 hybrid of ICR (CD-1 022 Charles River) and B6(Cg)-*Tyr*^{c-2J/J} (JAX Stock#000058)). Resulting chimeras were bred to B6(Cg)-*Tyr*^{c-2J/J} females, and germline N1 progeny identified by the presence of the *Tyr*⁺ allele in combination with the *A*^w (agouti, white belly) and *a* (non-agouti/black) coat color alleles. N1 female heterozygous carriers are mated to C57BL/6J (JAX Stock#000664), and N2 hemizygous male progeny are identified by PCR.

Gene & Allele Details

Allele Symbol: *Hprt1*^{tm24(Ple56-EGFP/NLS)*Ems*}
Allele Name: *Hprt1* targeted mutation #24, derived from Ple56 MiniPromoter, Elizabeth M. Simpson
Common Name(s): Ple56, *Hprt1*
Mutation Made By: Pleiades Promoter Project

Strain of Origin: 129Ola/Hsd (from E14TG2a)
ES Cell Line Name: mEMS1204
ES Cell Line Strain: (B6-*Hprt1*^{b-m3}/J x 129S1/SvImJ-*Gt(ROSA)26*^{tm1Sor})F1
Gene Symbol and Name: Ple56-EGFP/NLS
Chromosome: X
Strain of Origin: derived from B6-*Hprt1*^{b-m3} (E14TG2a)
Site of Expression: Expression is seen throughout the brain
Expressed Gene: GFP, Green Fluorescent Protein, jellyfish
Green Fluorescent Protein (*GFP*), derived from the jellyfish *Aequorea victoria*, is a versatile reporter molecule which has found use in many biological applications. The original molecule has been modified in order to enhance its fluorescence intensity (*EGFP*, enhanced GFP). When utilized in a transgenic construct, tissue expressing sufficient amounts of GFP will fluoresce when exposed to a 488 nm light source.
Promoter: Ple56

Control Information

Control:

Wild-type from the colony

Genotyping Protocols

See Ple56 Genotyping Assay File

Colony Maintenance

Breeding & Husbandry: Chimera x B6-*Tyr*^{c-2J} (B6-Alb) females generating N1 heterozygous females. N1 heterozygous females are mated to C57BL/6J males generating N2 hemizygous males. N2 Hemizygous males are mated to C57BL/6J females to generate hetero/hemizygous N3 progeny. Expected coat color from breeding: Black.

Animal Health Reports

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