

**Strain Name:** B6.129P2-*Hprt1*<sup>tm23 (Ple49-EGFP/NLS)Ems</sup> (DBH-B)

Chimeras were generated using mEMS1769\*, mEMS1772, and mEMS1783

\* 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)

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### **Appearance**

black

Related Genotype: *a/a*

### **Strain Description**

This transgenic mouse strain has an ‘enhanced’ GFP (EGFP) under the control of the Ple49 MiniPromoter. Please refer to MiniPromoter design construct file for further information.

### **Strain Development**

pEMS1360 was electroporated into mEMS1204 (B6129F1-*Gt(ROSA)26Sor*<sup>tm1Sor/+</sup>, *Hprt1*<sup>b-m3/Y</sup>) embryonic stem cells (ESCs), and positive constructs were microinjected into B6(Cg)-*Tyr*<sup>c-2J/J</sup> (JAX Stock#000058). Resulting chimeras were bred to B6(Cg)-*Tyr*<sup>c-2J/J</sup> females, and germline N1 progeny identified by the presence of the *Tyr*<sup>+</sup> allele in combination with the *A<sup>w</sup>* (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.

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### **Gene & Allele Details**

**Allele Symbol:** *Hprt1*<sup>tm23(Ple49-EGFP/NLS)Ems</sup>  
**Allele Name:** *Hprt1* targeted mutation #23, derived from Ple49 MiniPromoter, Elizabeth M. Simpson  
**Common Name(s):** Ple49, *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*<sup>b-m3</sup>/J x 129S1/SvImJ-*Gt(ROSA)26*<sup>tm1Sor</sup>)F1  
Gene Symbol and Name: Ple49-EGFP/NLS  
Chromosome: X  
Strain of Origin: derived from B6-*Hprt1*<sup>b-m3</sup> (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: Ple49

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### **Control Information**

**Control:**

Wild-type from the colony

### **Genotyping Protocols**

See Ple49 Genotyping Assay File

### **Colony Maintenance**

Breeding & Husbandry: Chimera x B6-*Tyr*<sup>c-2J</sup> (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.

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### **Animal Health Reports**

Upon Request