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## The porcine PHlcDNA linked to the halothane gene detects a *HindIII* and *XbaI* RFLP in normal and malignant hyperthermia susceptible pigs

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**Source/description:** 1.1 kb *BamHI/DraI*-fragment was isolated from a 2.0 kb *EcoRI*-fragment of the porcine phosphohexose-isomerase (PHI) cDNA derived from a  $\lambda$ gt11 (Stratagene) porcine skeletal muscle cDNA library and subcloned in pBS (Bluescribe, Stratagene) (Chaput *et al.*, 1988).

**Polymorphisms:** *HindIII* detects a two allele polymorphism with bands at 3.3 kb (A1) and 3.1 kb (A2). Constant bands at 0.5 kb, 4.9 kb, 5.1 kb, 18 kb, and 20 kb.

*XbaI* detects a two allele polymorphism with bands at 3.7 kb (B1) and 3.5 kb (B2). Constant bands at 5.1 kb and 20 kb.

**Frequency:** Studied in 90 pigs (88 German Landrace, 2 Pietrain).

<i>HindIII</i>	A1:0.69	<i>XbaI</i>	B1:0.69
	A2:0.31		B2:0.31

**Not polymorphic for:** *TaqI*, *PvuII*, *SacI*, *EcoRI*.

**Chromosomal localisation:** The PHI-gene has been mapped to chromosome 6p12-q22 by *in situ* hybridization to metaphase spreads (Davies *et al.*, 1988).

**Mendelian inheritance:** Co-dominant segregation was demonstrated in 10 halothane-tested families.

**Probe availability:** Requests for probe to Arsène Burny, Faculte des Sciences Agronomiques de L'Etat, 5800 Gembloux, Belgium.

**Acknowledgements:** The authors want to thank Arsène Burny for the kind gift of the porcine PHlcDNA-probe. Appreciation is extended to H.Domdey, M.Schartl, and E.-L.Winnacker for providing excellent working conditions.

**References:** (1) Chaput, M. *et al.* (1988) *Nature* **332**, 454–455  
(2) Davies, W. *et al.* (1988) *Animal Genetics* **19**, 203–212.

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## The porcine PHlcDNA linked to the halothane gene detects a *NotI* RFLP in normal and malignant hyperthermia susceptible pigs

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**Polymorphisms:** *NotI* detects a two allele polymorphism with bands at either 270 kb (A1) or 230 kb (A2).

**Frequency:** Studied in 15 pigs (German Landrace).

A1:0.46
A2:0.54

**Not polymorphic for:** *SfiI*, *BssHI*, and *SacII*.

**Chromosomal localisation:** The PHI-gene has been mapped to chromosome 6p12-q22 by *in situ* hybridization to metaphase spreads (Davies *et al.*, 1988).

**Mendelian inheritance:** Co-dominant segregation was demonstrated in 10 halothane-tested families.

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