

	Meat Quality	Meat Quality	Meat Quality	Meat Quality	Meat Quality		Growth type	Feed intake and ADG
GeneMarker	Napole RN	PRKAG3	Stress HAL 1843	CAST_249	CAST_638		MC4R	CCKAR
Possible combinations	GG,GA,AA	AA,AG,GG	CC,CT,TT	AA,AG,GG	AA,AC,CC		GG,AG,AA	GG,GA,AA
Desired Allele	GG= RN free	AA	CC= Stress free	AA	AA		A <u>or</u> G	GG
Carrier	GA	AG	CT	AG	AC		see description below	GA
2 copies of the undesired allele	AA= homozygous mutant	GG	TT= di-mutant	GG	CC			AA

Misc. information

muscle glycogen

(additional test to Napole RN test)

- * pH
- * color

Kinase protein

Tenderness

Tenderness

- * pH
- * water holding capacity
- * tenderness

CAST = calpastatin protein

- *firmness
- *juiciness
- *Instron
- *cooking loss
- *chewiness
- *tenderness

Lean/Efficient Growth

GG=
8-9% less backfat
lower intake
significantly better FE

Fast Growth
AA=

grow faster
eat 8% more feed
(reach market 3 days sooner than GG pigs)

G =

5% better feed intake
3% better ADG
3% fewer days to 180kg

associated with:

feed intake
hunger control
obesity
(NEVER had an animal with other than GG)