

Reference	This Study	Schauer et al., 2006	Baxter et al., 2006	Causse et al., 2004	This Study
Genotype	Enzyme activity QTL	Metabolite QTL ¹	Expression QTL ²	Structural gene for enzyme in genomic region	
IL-1-2	TPI	∅		no	TPI (Solyc01g111120) is outside IL1-2. No Mapping info is available for IL1-2 start marker TG80, but Solyc01g111120 is located beyond the end marker for IL1-2 (TG295)
	NAD-MDH			yes	Solyc01g090710 is contained within IL1-2. No mapping information is available for start marker TG80, however co-located markers can be used to estimate it's position(TG51 , CT151, TG378). Solyc01g090710 is contained between the co-located markers and the IL1-2 end marker (TG295)
IL-1-3	TPI		<i>Tpi</i> , encoding the Triose P isomerase (chloroplast)	no	TPI (Solyc01g111120) is not contained within IL1-3. End marker for IL1-3 (CA610) is unmappable but is co-located with TG375. Solyc01g111120 is not contained between the start marker for IL1-3 (TG295) and TG375.
IL-2-4	TPI	aspartate content increased (p < 0.05 in 2003; p < 0.01 in 2004)	<i>Ppfb</i> encoding the PPI-PFK cLED24M16 matches on 2.39807591	no	
	PPI-PFK			yes	Solyc02g081160 is contained within the IL2-4. The end marker TG463 is unmappable but markers either side of TG463 indicate its located (CT166 and TG131). Solyc02g081160 is contained within the start marker TG145 and the markers that located near the IL2-4 end marker.
IL-2-5	PPI-PFK	∅		yes	Solyc02g081160 falls within the IL2-5 markers (TG353 and CT59).
IL-3-2	NAD-GIDH	sucrose content increased (p < 0.05)		yes	Solyc03g094010 likely falls within the IL3-2 region. Although the marker (CT90) was found to map to Chromosome 6, it was also found to match reasonably well to a region on Chromosome 3. Solyc03g094010 was found to be contained between this region and the IL3-2 start marker (TG517)
IL-3-4	NAD-GAPDH	fructose 6P (p < 0.005) and alanine (p < 0.05) contents increased; malate content decreased (p < 0.05)		no	Solyc03g111000 and Solyc03g111010 may fall just outside the IL3-4 markers. These genes do not fall with the IL3-4 inclusive markers but do however fall between the start exclusive marker (TG129) and the inclusive start marker (TG599).
IL-4-1	PEPC	∅	<i>Ppc3 (1)</i> , encoding the LePPC3 PEP carboxylase AW929959 matches on Chr 4 663638	yes	Solyc04g006970 is at position 663,809 and likely falls within IL4-1. Although the start marker GP180 is unmapped, it would appear to be located at the start of the chromosome. Solyc04g006970 is contained within the end maker (TG182)
IL-4-2	PGI	∅		no	Solyc04g076090 falls outside of the IL4-2 region.Solyc04g076090 is contained beyond the IL4-2 end maker.
IL-4-4	NAD-GAPDH		GAPDH (+)	yes	Solyc04g082630 is contained within the IL4-4 markers (CT50 and TG464)
	UGP	increased: fructose (p < 0.01), sucrose, glucose, fructose 6P, glycerate 3P, citrate, isocitrate, aspartate, glutamate and succinate (all with p < 0.05)		no	
	FruK		Fructokinase 2 (+) <i>Fk(1)</i> Fructokinase-like protein (80% A. th.)	no	
IL-5-2	PPI-PFK	glucose increased (p < 0.05; only measured in 2003)		no	
IL-5-4	NAD-MDH			no	
IL-7-2	TPI	glycerate 3P content increased (p < 0.05)		no	
IL-7-4	PPI-PFK	∅		yes	Solyc07g049280 is contained within the IL7-4. Although the start marker CP52 is unmappable, it would appear to be located at the start of the chromosome. It's position can also be estimated by co-located markers (TG418, TG342, TG131).Solyc07g049280 is contained with this co-located marks and the IL7-4 end marker (CT84)
	ATP-PFK			yes	Solyc07g045150 is contained within the IL7-4. Although the start marker CP52 is unmappable, it would appear to be located at the start of the chromosome. It's position can also be estimated by co-located markers (TG418, TG342, TG131).Solyc07g049280 is contained with this co-located marks and the IL7-4 end marker (CT84)
IL-7-4-1	NAD-GAPDH	∅		no	
IL-9-2	ShkDH	glucose content increased (p < 0.05)		no	

IL-10-1	NAD-GAPDH	Ø	no	Although the start marker for IL10-1 is located at the start of the chromosome, Solyc10g005510 has been mapped outside (north) of this.
IL-10-3	Invertase	Ø	yes	Solyc10g083290, Solyc10g083300, Solyc10g085360, Solyc10g085640 and Solyc10g085650 may well all be contained within the IL10-3. Start marker CP49 cannot be mapped, however it's location can be estimated by looking at marker either side (CT57 and TG241). Using these neighbouring markers, it can be determined that Solyc10g085360, Solyc10g085640 and Solyc10g085650 are between these markers and the IL10-3 end marker (TG233). With current marker information, it is not possible to say that Solyc10g083290 and Solyc10g083300 are contained within the IL10-3, but it would seem highly likely that they do.
IL-11-3	ShkDH	Ø	no	
	Invertase		no	
IL-12-3	TPI	Ø	no	
	PGM		no	
	UGP		no	

Legend: ¹ = only for substrates or products of all enzymes analyzed in this study
² = significant change in the expression of transcripts encoding the corresponding enzyme