

Table S2: Genes differentially or specifically regulated during nodulation in *Alnus glutinosa*.

NOD (NODule) and NIR (Non Inoculated Root) are mean values of three biological replicates. Fold Change (FC) is the ratio between The significant difference of gene expression between root and nodule was assessed by a t-Student test at $p < 0.01$.

A- Genes up- (FC ≥ 2) and down-regulated (FC ≤ 0.5).

B- Genes specifically induced or repressed in nodu

Probes accession numbers are available in GEO database, www.ncbi.nlm.nih.gov/geo (GSE24153).

A- Genes differentially regulated

Probe Name	NOD	NIR	FC	T-student	Sequence homology
UP-REGULATED					
AGCL10Contig3	1168.910	0.759	1539.56	0.00921	actinorizal nodulin ghrp
AGCL23Contig1	41.424	0.037	1123.35	0.00008	gamma-expansin natriuretic peptide
AG-N01f_001_E15	111.833	0.232	481.46	0.00166	receptor protein kinase perk-like
AG-N01f_021_C14	213.496	0.532	400.94	0.00965	integral membrane family protein
AG-N01f_032_M24	236.708	0.774	305.73	0.00945	PMR5 (POWDERY MILDEW RESISTANT 5)
AG-R01f_030_G24	251.067	0.871	288.39	0.00427	Ntp27like protein
AG-N01f_011_P13	64.110	0.231	277.20	0.00615	NA
AG-N01f_002_I06	161.986	0.615	263.57	0.00909	NA
AGCL454Contig1	189.715	0.789	240.45	0.00321	NA
AG-N01f_017_D15	95.229	0.548	173.71	0.00566	betatubulin 14
AGCL3713Contig1	103.018	0.665	155.02	0.00124	defensin amp1 protein
AG-N01f_032_B10	64.597	0.476	135.71	0.00123	anthocyanin-O-methyltransferase
AGCL563Contig1	101.753	0.801	127.02	0.00792	NA
AGCL1540Contig1	44.679	0.448	99.80	0.00567	NA
AG-N01f_041_J16	43.213	0.465	93.01	0.00950	NA
AGCL726Contig1	1.182	0.014	85.59	0.00803	NA
AG-N01f_016_D15	47.323	0.576	82.23	0.00508	NA
AGCL2340Contig1	12.062	0.149	81.09	0.00239	cellulose synthase catalytic subunit
AG-R01f_024_I03	1.064	0.016	65.66	0.00451	NA
AG-N01f_026_N11	19.300	0.309	62.42	0.00246	NA
AG-N01f_042_N07	58.338	0.958	60.88	0.00989	amino acid permeaselike protein
AGCL3383Contig1	31.413	0.539	58.33	0.00635	NA
AGCL3639Contig1	33.848	0.610	55.49	0.00927	NA
AGCL3012Contig1	34.412	0.628	54.81	0.00334	NA
AG-N01f_025_P14	46.139	0.895	51.52	0.00628	NA
AG-R01f_010_G21	1.017	0.021	49.34	0.00177	cytochrome oxidase subunit ii
AGCL2272Contig1	52.619	1.067	49.33	0.00014	ac006341_8contains a pf
AG-N01f_036_O07	40.334	0.831	48.52	0.00631	nucellinlike protein