**Table S1. *GPAT* genes of *Arabidopsis*, and *cacao* used to construct phylogenetic trees in this study.**

|  |  |  |
| --- | --- | --- |
| **Gene name** | **Accession NO.** | **Species** |
| ***AtACT1*** | **AT1G32200** | ***Arabidopsis thaliana*** |
| ***AtGPAT1*** | **AT1G06520** | ***Arabidopsis thaliana*** |
| ***AtGPAT2*** | **AT1G02390** | ***Arabidopsis thaliana*** |
| ***AtGPAT3*** | **AT2G38110** | ***Arabidopsis thaliana*** |
| ***AtGPAT4*** | **AT4G01950** | ***Arabidopsis thaliana*** |
| ***AtGPAT5*** | **AT3G11430** | ***Arabidopsis thaliana*** |
| ***AtGPAT6*** | **AT1G01610** | ***Arabidopsis thaliana*** |
| ***AtGPAT7*** | **AT5G06090** | ***Arabidopsis thaliana*** |
| ***AtGPAT8*** | **AT4G00400** | ***Arabidopsis thaliana*** |
| ***AtGPAT9*** | **AT5G60620** | ***Arabidopsis thaliana*** |
| ***TcGPAT1*** | **XP\_007051782** | ***Teobroma cacao*** |
| ***TcGPAT2*** | **XP\_007041647** | ***Teobroma cacao*** |
| ***TcGPAT3*** | **XP\_007048860** | ***Teobroma cacao*** |
| ***TcGPAT4*** | **XP\_007051174** | ***Teobroma cacao*** |
| ***TcGPAT5*** | **XP\_007009249** | ***Teobroma cacao*** |
| ***TcGPAT6*** | **XP\_007044411** | ***Teobroma cacao*** |
| ***TcGPAT7*** | **XP\_007032883** | ***Teobroma cacao*** |
| ***TcGPAT8*** | **XP\_007032348** | ***Teobroma cacao*** |
| ***TcGPAT9*** | **XP\_007026769** | ***Teobroma cacao*** |
| ***TcGPAT10*** | **XP\_007031180** | ***Teobroma cacao*** |
| ***TcGPAT11*** | **XP\_007018890** | ***Teobroma cacao*** |
| ***TcGPAT12*** | **XP\_007040713** | ***Teobroma cacao*** |
| ***TcGPAT13*** | **XP\_007018889** | ***Teobroma cacao*** |