## Expression and localization of Phosphoinositidespecific Phospholipase C enzymes in polarized macrophages

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The phenotypic and functional diversity of macrophages depends on differentiating programs being developed during the cells' lives. Great interest was addressed to identify the signal transduction pathways acting in macrophage polarization, including the phosphoinositide (PI) system and related phospholipase C (PLC) family of enzymes. Enzymes belonging to the PLC family are strictly tissue specific and the expression panel, as well as the subcellular localization differs in quiescent cells compared to the pathological counterpart. We analyzed the expression of PLC enzymes in unpolarized (M0), M1 and M2 macrophages to list the isoforms expressed in the polarized macrophages and their subcellular localization.

Our results confirmed that macrophages express a wide number of PLC isoforms. All PLC enzymes were detected within both M1 and M2 cells, but not in M0 cells. M0, as well as M1 and M2 cells own a specific panel of expression, different for both genes' mRNA expression and intracellular localization of PLC enzymes. PLC enzymes might play a complex role in macrophages during inflammation and probably also during polarization.

## References

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## Keywords -

Macrophages; polarization; M1; M2; phosphoinositide; phospholipase C; signal transduction.