

It was shown that there are 89210 molecules of MCH-II per one cell (= $89210 \cdot 10^3$ molecules/kcell) of iDC (monocytes activated by GM-CSF/IL-4) [PMID: 16210595]. It was shown that expression of MHC-II on mDC1 (iDC activated by LPS) is in about 1.5 times higher than on iDC [PMID: 22025302]. Thus:

$$c_mdc1_mhc2 = (1.5 \cdot 89210 \cdot 10^3 \text{ [molecules/kcell]}) / (6 \cdot 10^{23} \text{ [molecules/mol]}) = 2.23 \cdot 10^{-16} \text{ [mol/kcell]} = 2.23 \cdot 10^{-4} \text{ [pmol/kcell]}$$

where $6 \cdot 10^{23}$ molecules/mol - Avogadro's number