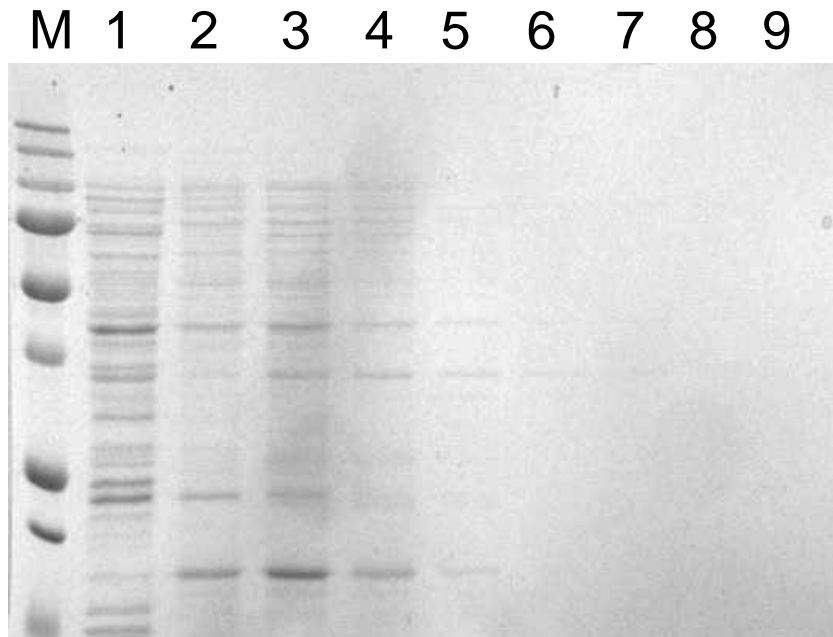
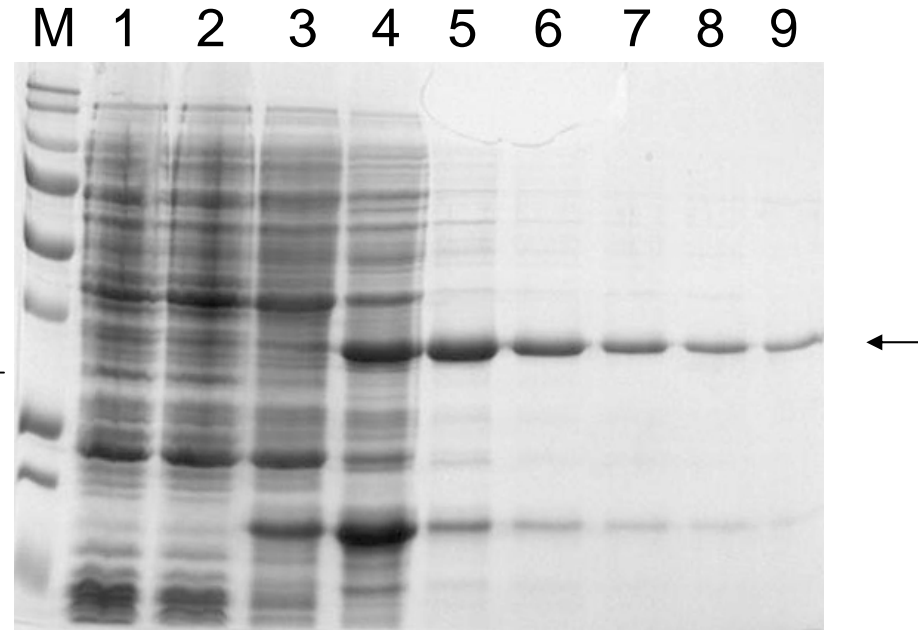


ProGro™ medium increases yield, solubility, and activity of nuclear hormone receptor SXR

SXR expressed in LB broth



SXR expressed in ProGro™



His-tagged steroid and xenobiotic receptor (SXR) was expressed in LB broth and high density growth medium ProGro™. SXR is almost completely soluble in ProGro™ medium (lane 4, soluble fraction). Significant amount of proteins can be purified from Ni-agarose beads (lanes 5-9, different elutions). In contrast, the same construct expressed in LB has about half of the protein in the insoluble fraction (lane 3, insoluble fraction). Little protein can be purified from its soluble fraction. Lanes 1 and 2 are E.coli cells without and with the expression plasmid. Cells with plasmids do not grow well in LB broth (lane 2 of left gel). In contrast, cells with plasmids grow very well in ProGro™ medium and is indistinguishable from the cells without plasmid. SXR purified from ProGro is functional while its purification from LB is not active.