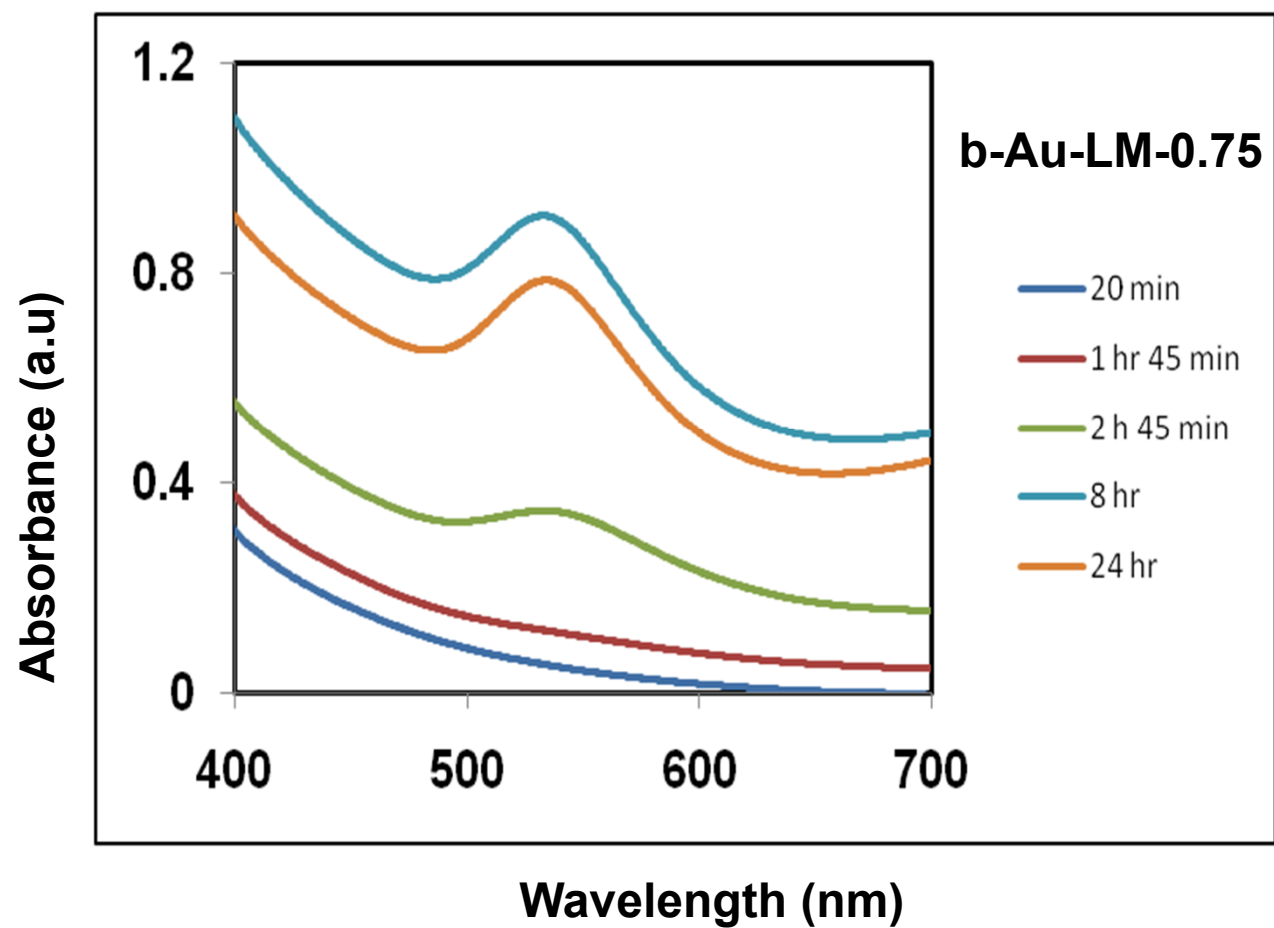


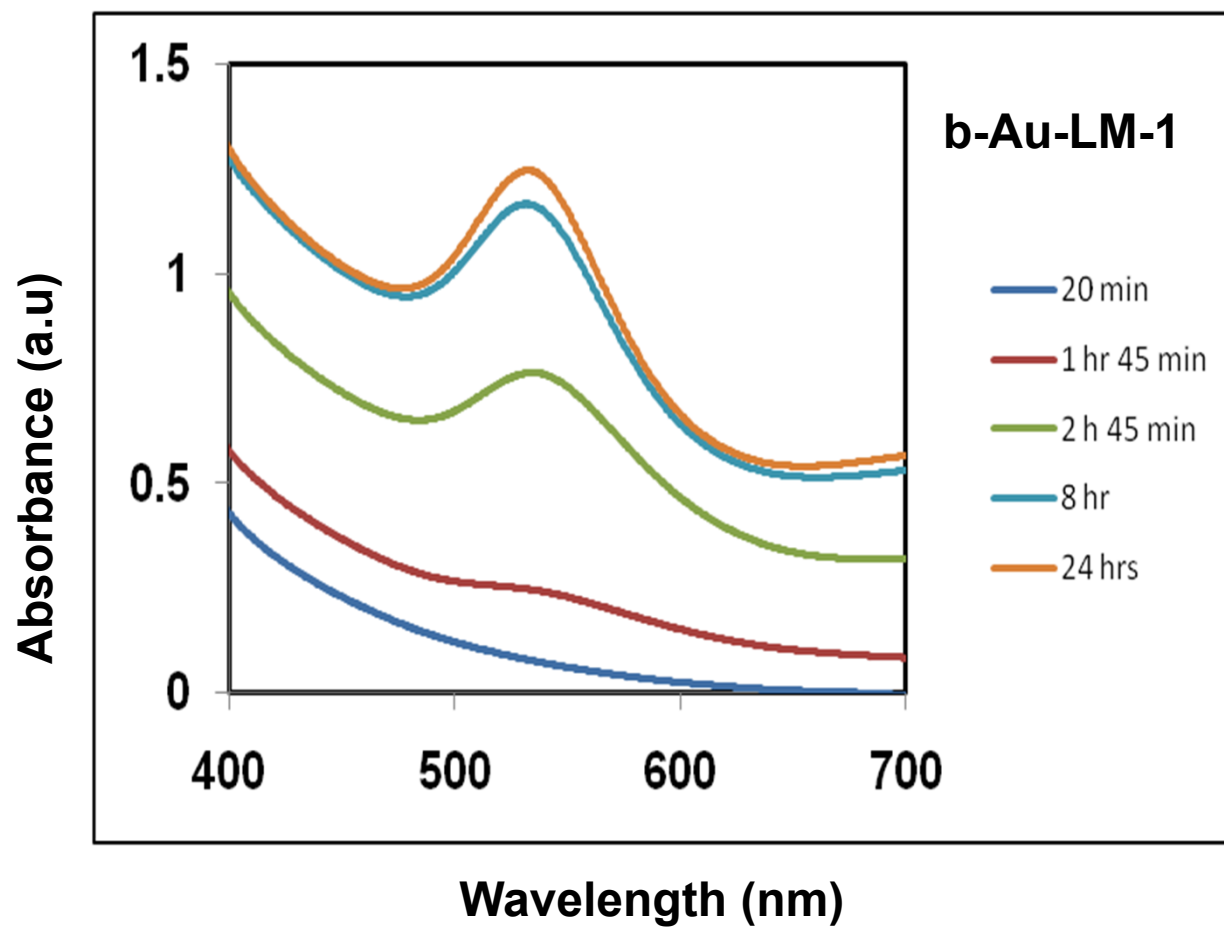
Supporting Information

SI.Fig.1.a



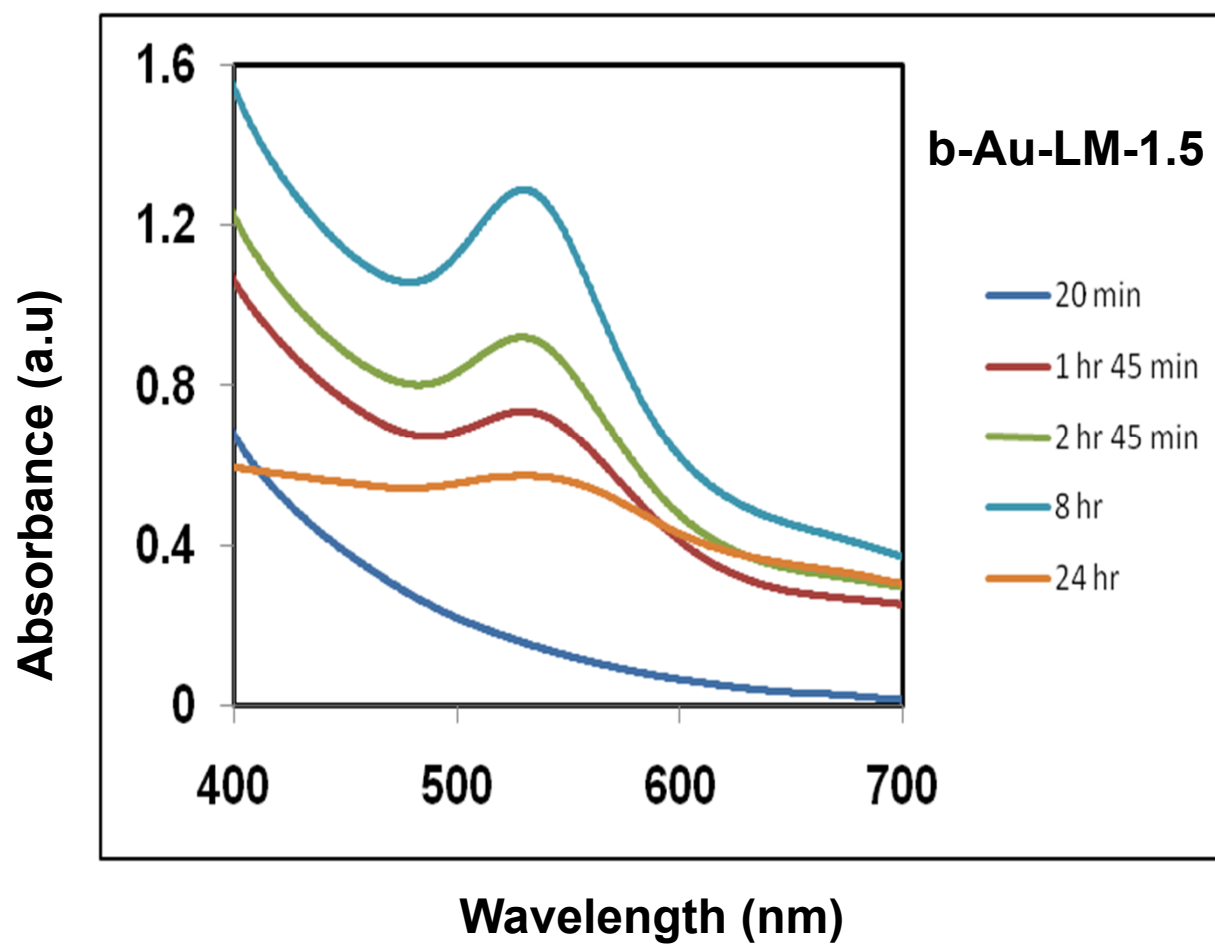
SI.Fig.1.a: Time dependent UV-Visible spectrum of b-Au-LM-0.75, reaction kinetics study.

SI.Fig.1.b



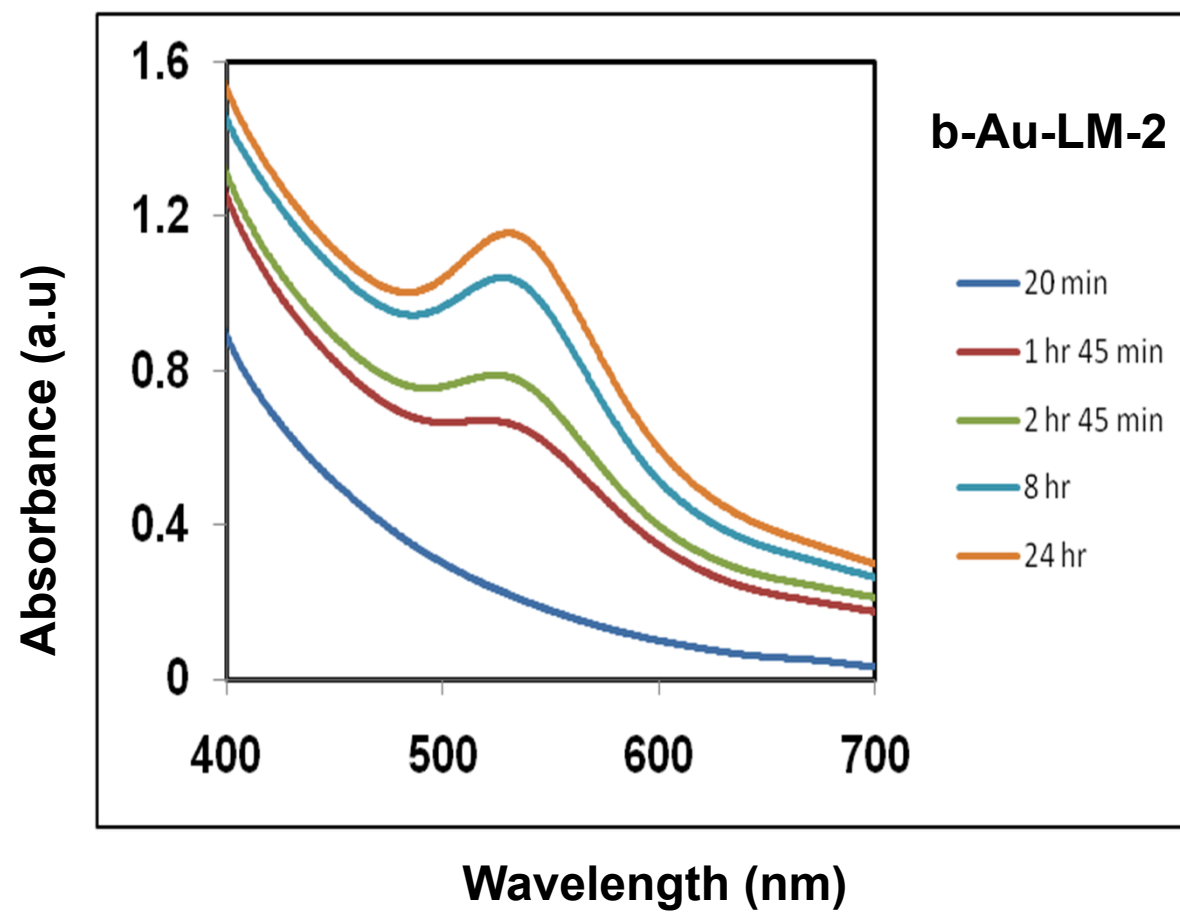
SI.Fig.1.b: Time dependent UV-Visible spectrum of b-Au-LM-1, reaction kinetics study.

Sl.Fig.1.c



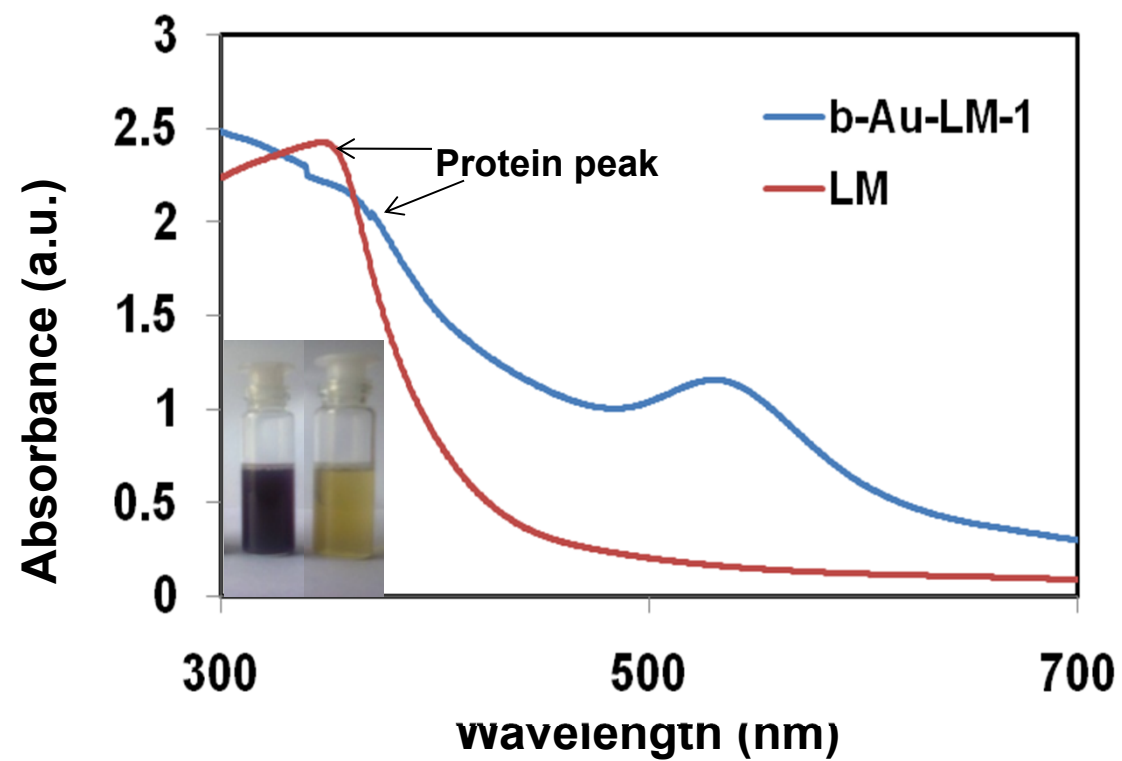
Sl.Fig.1.c: Time dependent UV-Visible spectrum of b-Au-LM-1,.5 reaction kinetics study.

SI.Fig.1.d



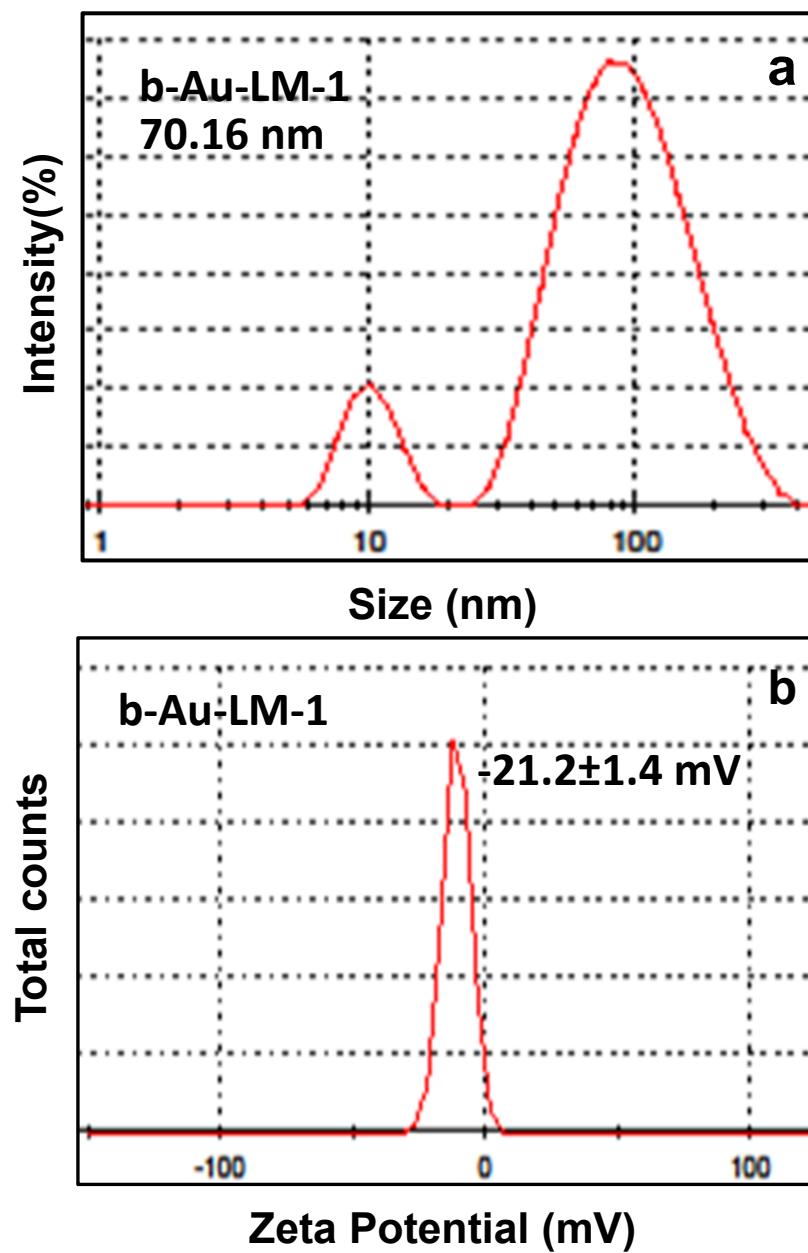
SI.Fig.1.d: Time dependent UV-Visible spectrum of b-Au-LM-2 reaction kinetics study.

SI.Fig.2



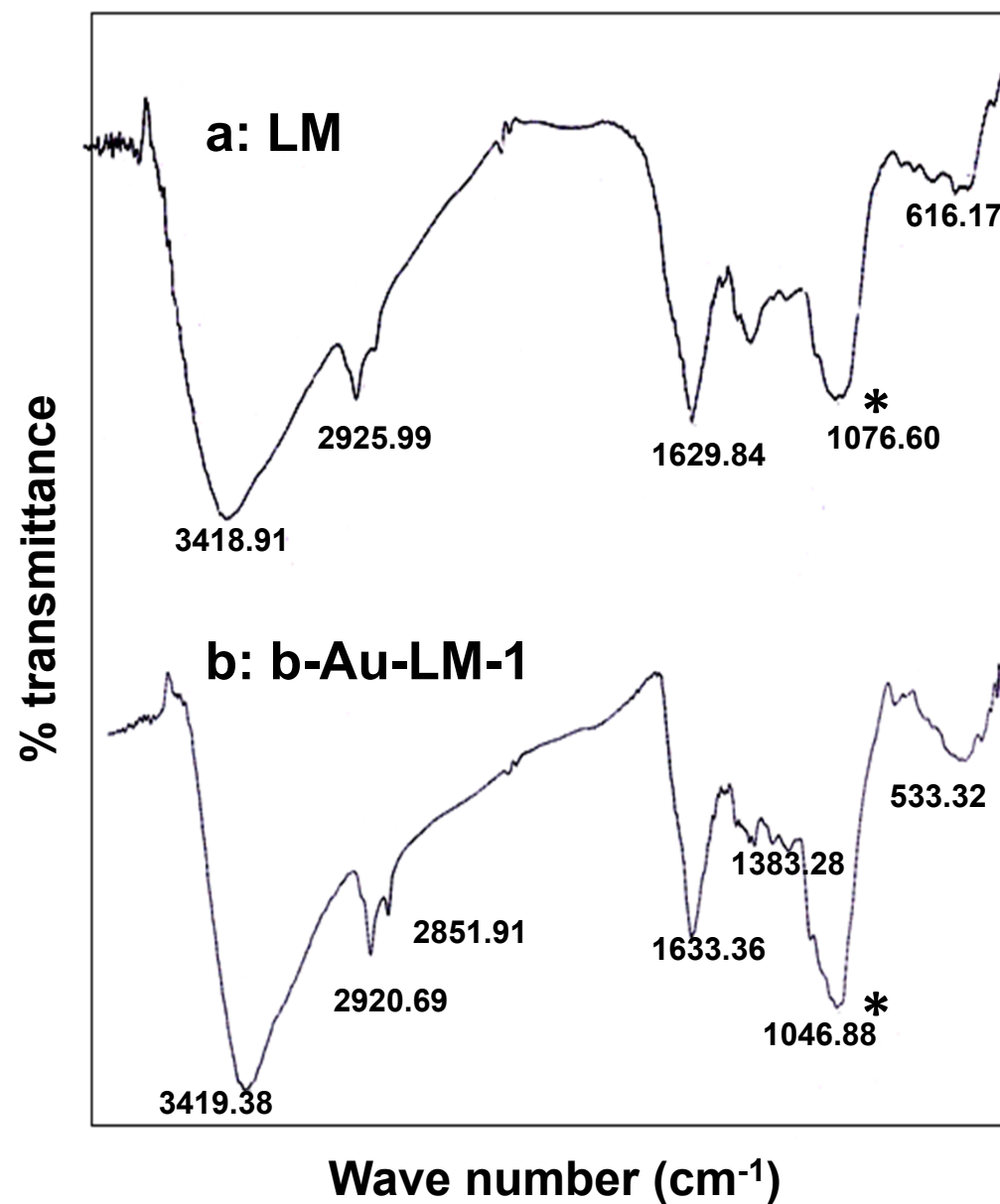
SI.Fig.2: UV-visible spectrum of LM extract and b-Au-LM-1. Inset shows the color images.

SI.Fig.3.a-b



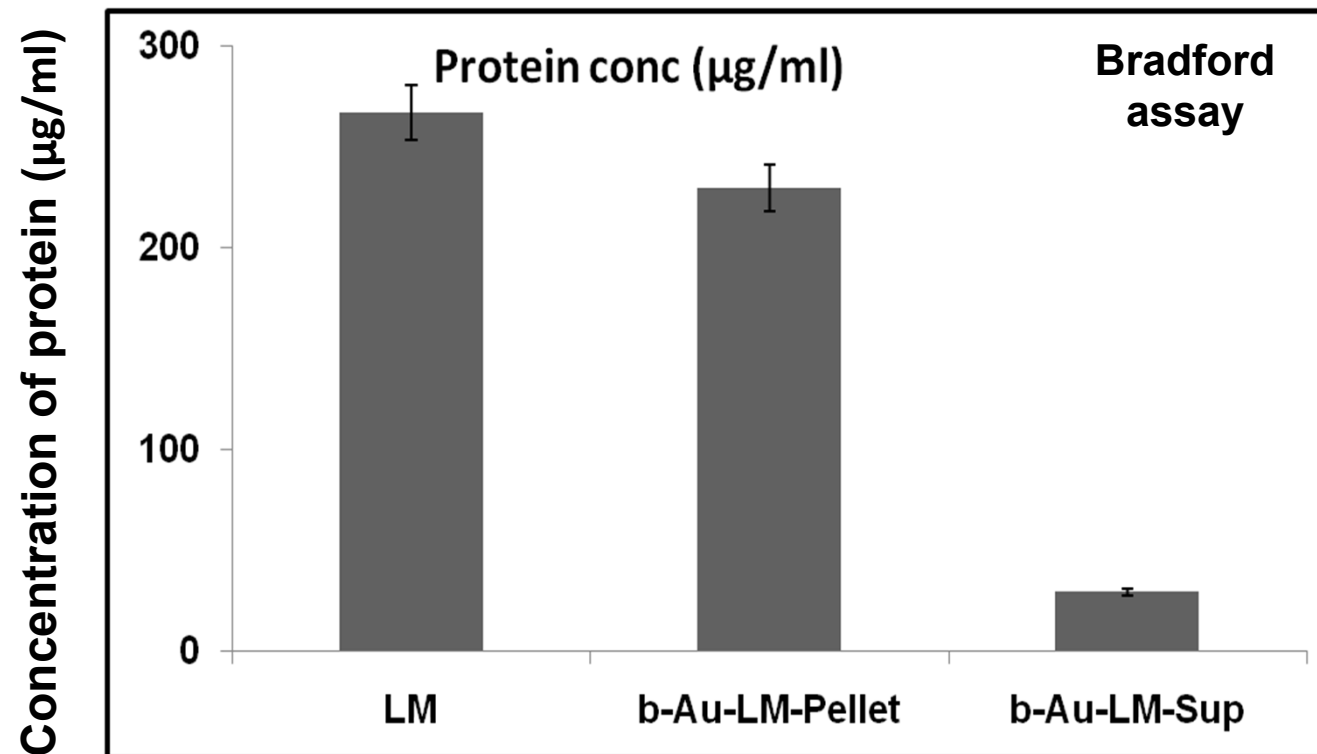
SI.Fig.3.a-b: DLS study of b-Au-LM-1 for size and surface charge or zeta potential.

SI.Fig.4.a-b



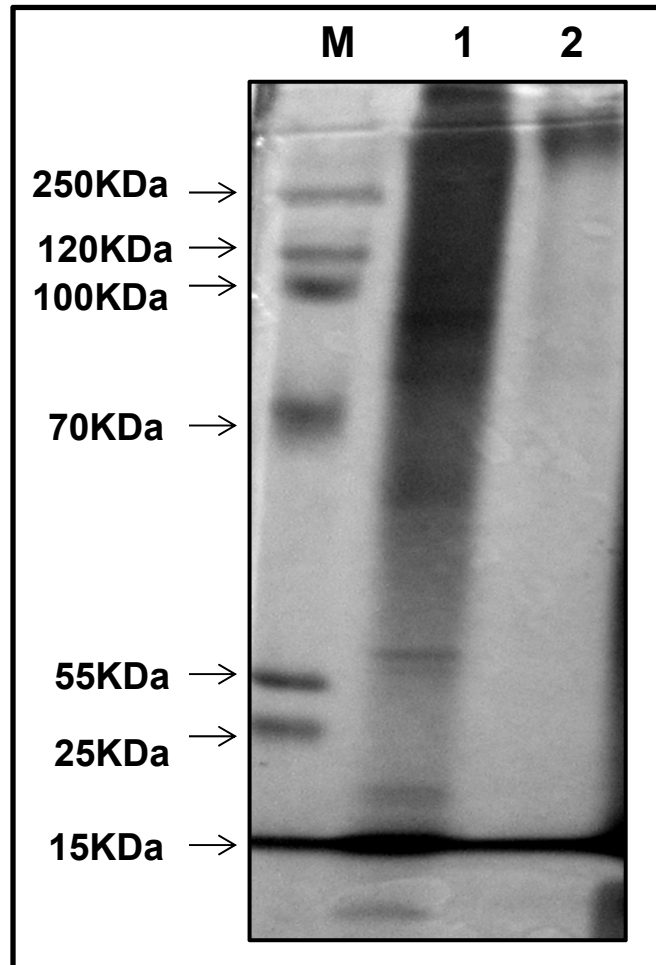
SI.Fig.4.a-b: FTIR of LM and b-Au-LM-1 to understand the role of phytochemicals for the synthesis of gold nanoparticles by LM extract.

SI.Fig.5



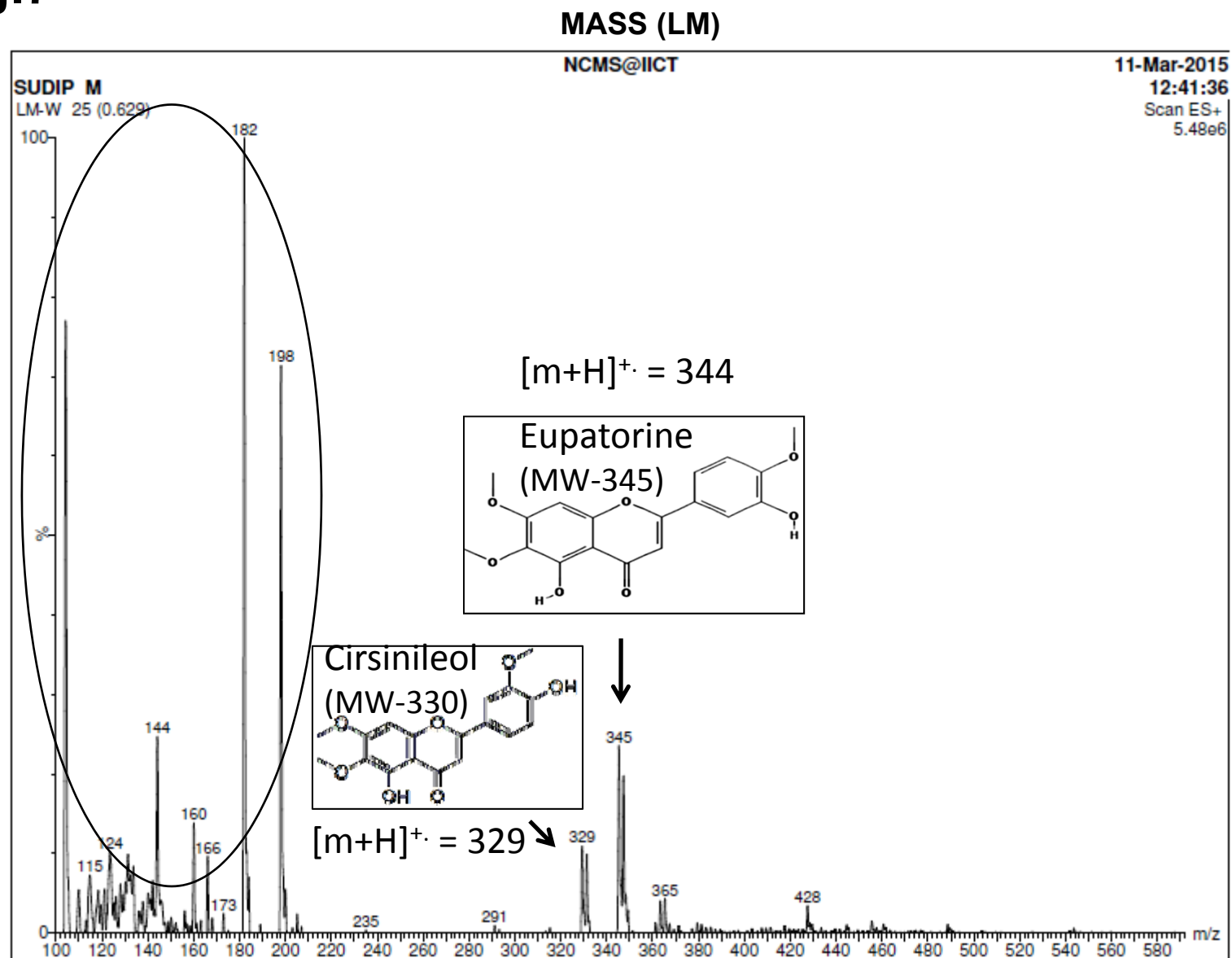
SI.Fig.5 :Bradford assay for the measurement of protein (µg/mL) in LM, b-Au-LM-1 pellet and the supernatant of b-Au-LM-1..

SI.Fig.6



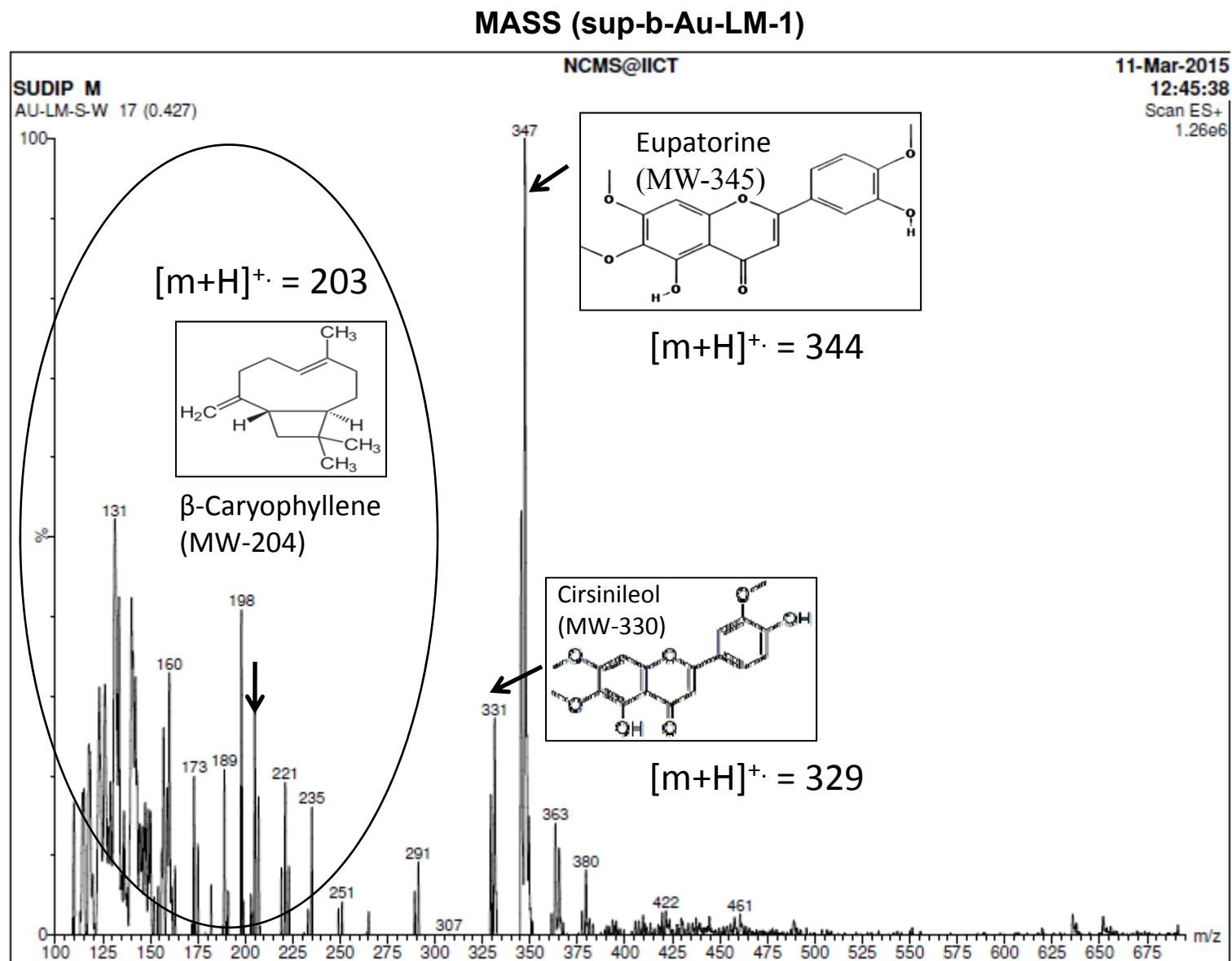
SI.Fig.6: SDS-PAGE analysis of LM and b-Au-LM-1 to understand the role of proteins for the synthesis of gold nanoparticles by LM extract.

SI.Fig.7



SI.Fig.7: Mass spectroscopic (ESI) analysis of LM.

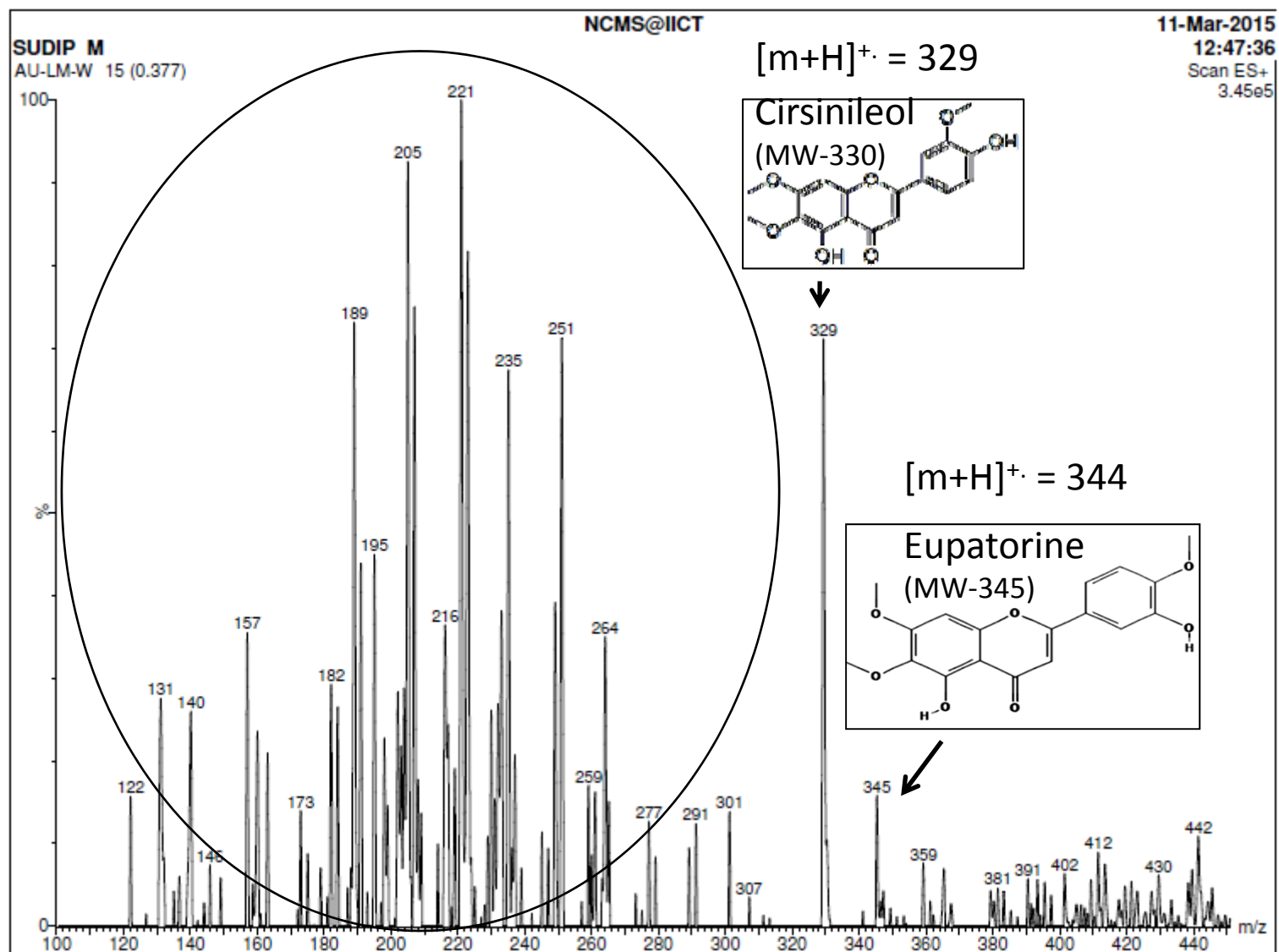
SI.Fig.8



SI.Fig.8: Mass spectroscopic (ESI) analysis of supernatant of b-Au-LM-1.

SI.Fig.9

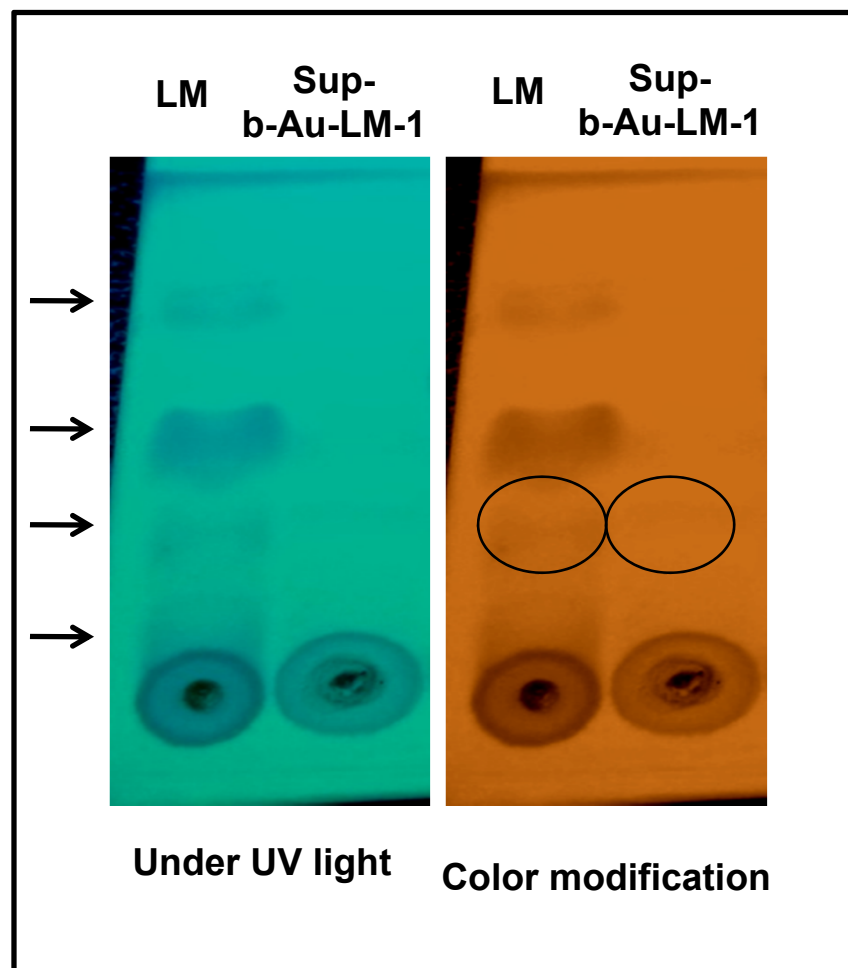
MASS (b-Au-LM-1)



SI.Fig.9: Mass spectroscopic (ESI) analysis of b-Au-LM-1.

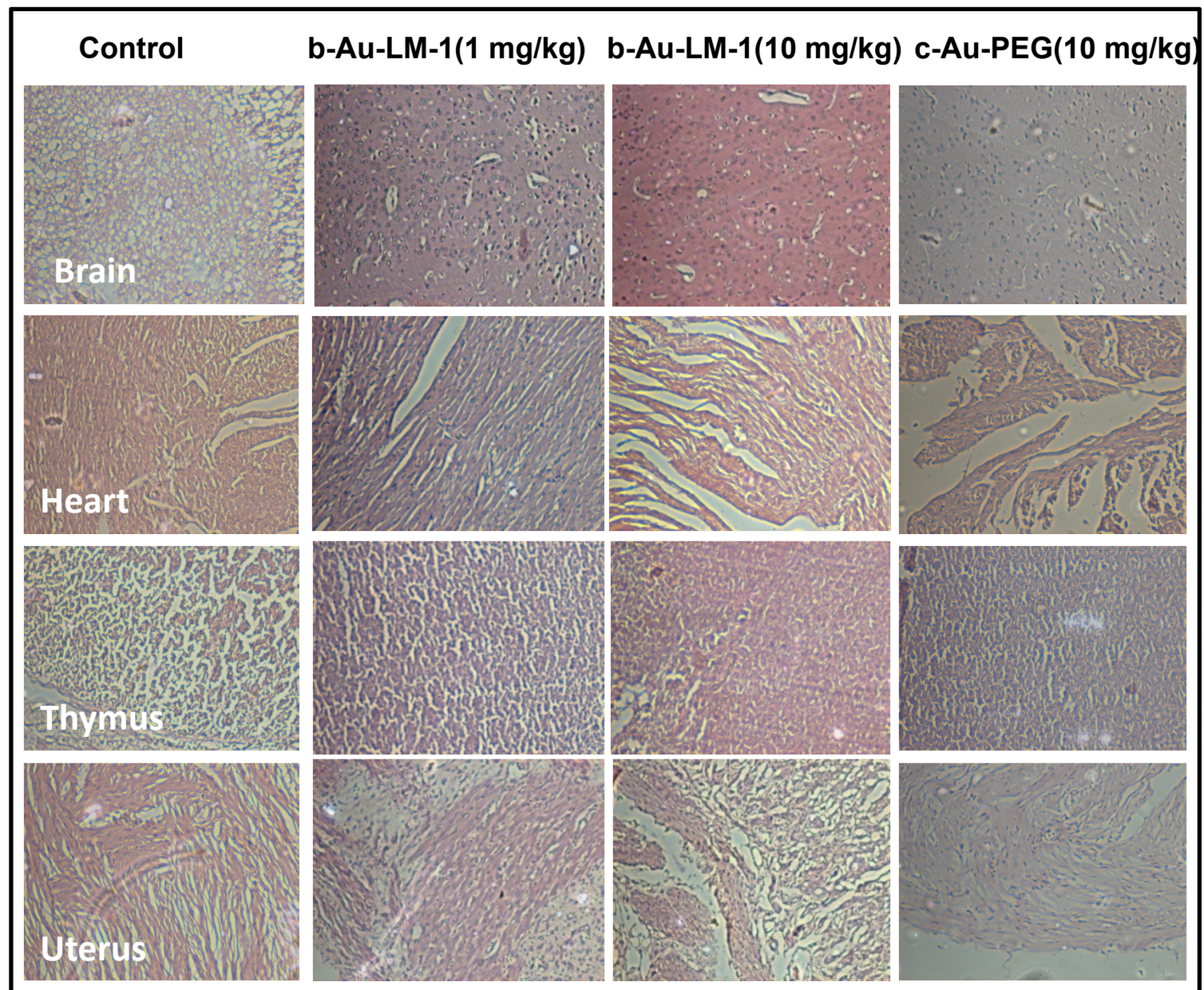
Sl.Fig.10

TLC DATA (40 % EtOAc-Hexane)



Sl.Fig.10: Thin layer chromatographic (TLC) analysis of LM and supernatant of b-Au-LM-1

Sl.Fig.11



Sl.Fig.11: Histopathological study. Sections of the different organs of control and treated C57BL6/J mice with b-Au-LM-1 (1 mg/kg & 10 mg/kg) and c-Au-PEG (10 mg/kg) for 7 days repeated doses and analyzed using H&E staining.