Watermarking by embedding watermark in region of interest (ROI) is not robust against some popularly used data compression. This paper proposes a method of ROI image watermarking that is robust against compression by embedding watermark in the middle frequency of subband wavelet transform and searching ROI based on segmentation of image. The image segmentation is done on the multiresolution to search ROI for reference position in embedded and extracted watermarking. Binary watermark image passed pseudo random process is then embedded into ROI. The experimental results show that the embedded watermark robust against high compression rate.