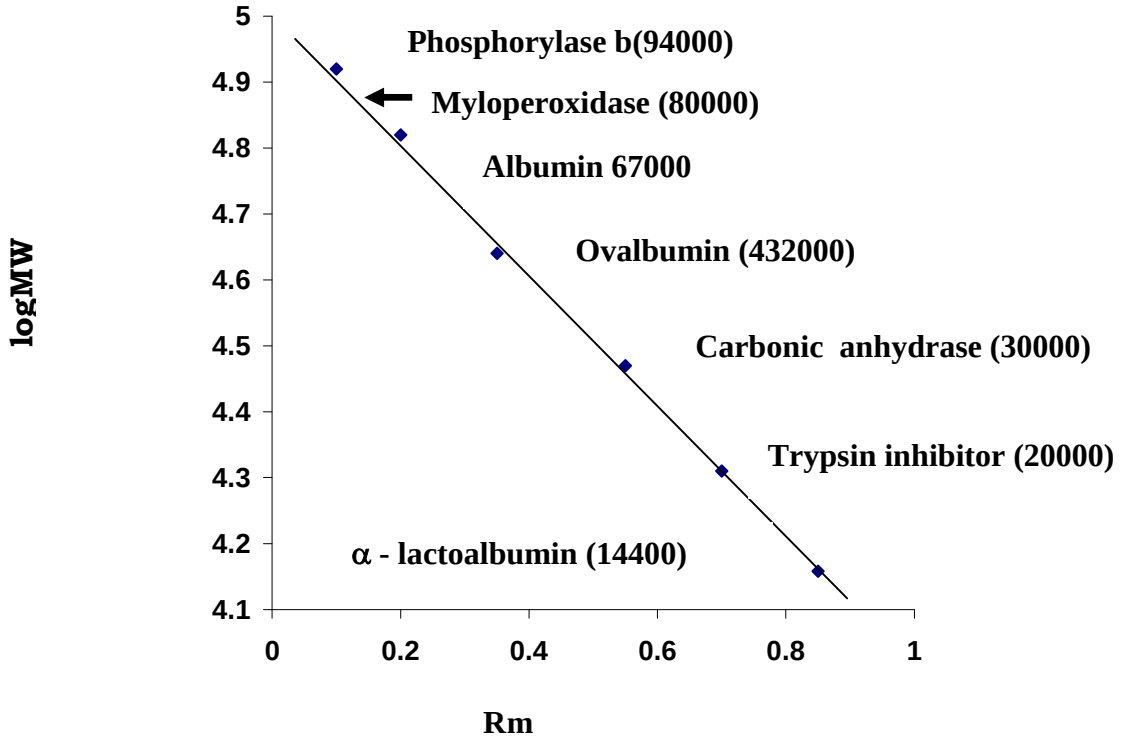

Figure 4: Determination of molecular weight for human MPO by SDS polyacrylamide gel electrophoresis.

In previous studies human (MPO) was purified from Leukocytes of pool peripheral blood from several donors, heterogeneity has been observed in the purified (MPO) obtained in this way possibly due to the heterogenecity of its source and several form of human (MPO) have been separated by polyacrylamide gel electrophoresis[15].

Discussion

Matheson[16] purified human leukocyte (MPO) to homogeneity by three steps namely, dialysis of agranule extract against low salt buffer, Sephadex G-75 chromatography and Carboxy methyl cellulose chromatography. The final yield of activity was excellent and represented 79% of the orginal activity in leukocyte homogenate, the final homogeneous when examined by acid polyacrylaimde gel electrophoresis and Sedimentation equilibrium ultracenterfugation, while[17] purified human (MPO) from Leukemia HL-60 by Carboxymethyl Sepharose CL-6B column chromatography, and Sephacryl S-200 gel Filtration with 31.2% yield and 737.1 unit/mg specific activity. They found that MPO consisted of a small size; Mr 79,000 daltons in addition to large size Mr, 153,000 daltons the small MPO differed in immunological properties from large MPO.

Brown[18] purified human myloperoxidase to sodium dodecyl sulfate-polyacrylaimde gel electrophoresis and a minor band with apparent molecular masses of 60000 Daltons and 15000 Daltons respectively, were recognized by both antibodies- under reducing and denaturing conditions on polyacrylaimde gel electrophoresis , human myelperoxidase gave rise to bands of Mr 57,000;39,000;500[5].

Kettle[19] purified (MPO) from neutrophils, azurophilic granules released by sonication of cells are extracted using cetyltrimethyl- aminonium bromide (CTAB), purification of the enzyme was