Interleukin-2 soluble receptor (IL-2 sR): The soluble form of the interleukin-2 receptor α (IL-2 sRα) is a sensitive measure of T-cell lymphocyte activation. Elevated levels of IL-2 sRα have been detected in a number of autoimmune diseases and cancers and have been reported to be associated with myocardial infarction as well (Blum A, Sclarovsky S, Rehavia E, Shohat B. Levels of T-lymphocyte subpopulations, interleukin-1β, and soluble interleukin-2 receptor in acute myocardial infarction. *Am Heart J* 1994;127:1226-1230.) IL-2 sRα is measured by ultra-sensitive ELISA (R&D Systems, Minneapolis, MN). The lower detection level is 10 pg/ml and the detection range is 78.1 – 5000 pg/ml. Serum or plasma samples may be used. The assay plate is precoated with a monoclonal antibody specific for IL-2 sRα and an anti-IL-2 sRα polyclonal antibody is used as the sandwich assay. The amount of IL-2 sRα is determined colorimetrically.