A well known theorem proved by Grothendieck says that every norm compact subset of a Banach space is contained in the closed convex hull of a norm null sequence. Recently, Dowling, et. al., showed that an analogous result for weak compactness in a Banach space is equivalent to the Schur property. In this talk I will present a similar type of result in the Mackey dual which Dowling and I proved recently. I will also present a related result for weak* compact sets in the dual of a Banach space.