Prosopis spp are considered multipurpose trees and shrubs by FAO. Prosopis fruits constitute a food source for humans and animals of Monte desert. In Argentina “flour of algarrobo” is a Prosopis food product of the mature pod milling in which the most of the seeds are discarded due to the hardness of the endocarp. The seed proteins from P. nigra and P. alba could be used as antioxidant food additive. Antioxidants are useful in retarding lipid peroxidation and thus help to maintain flavor, texture, and, in some cases, the color of the food products during storage. The aim of this work was the extraction of proteins from seed cotyledons of Prosopis and the evaluation of their antioxidant capacity. The proteins extraction was performed with phosphate buffer- sodium chloride, sodium hydroxide followed of acid precipitation (pI=5) and the characterization by SDS-PAGE. Protein and sugar determination, were performed with spectrophotometric techniques and the antioxidant capacity by ABTS assay. The alkaline extraction showed higher yield than buffer extraction. All extracts were scavengers of ABTS•+ with SC_{50} of 2.12 to 4.49 mg DW cotyledons/ml. The protein isolate from Prosopis sp. with antioxidant properties could be used as food additive.