Basal cell and squamous cell carcinoma of skin are common tumors which can be easily distinguished on hematoxylin and eosin stained sections, but basosquamous carcinoma is a controversial entity. The aim of our study was to distinguish basal cell carcinoma and basosquamous carcinoma using Ber-EP4, immunohistochemically in 52 skin tumors. Twenty basal cell carcinomas, 20 squamous cell carcinomas, 10 basosquamous carcinomas and 2 collision tumors of the skin were stained with Ber-EP4 immunohistochemically. All basal cell carcinomas were stained strongly and diffusely with Ber-EP4, whereas squamous cell carcinomas were not, and basosquamous carcinomas were partially stained. Our results suggest that, distinction of basal cell carcinoma and basosquamous carcinoma can be achieved with routine immunohistochemical Ber-EP4 staining.