We prove estimates in Hölder spaces for some Cauchy-type integral operators representing holomorphic functions in Cartesian and symmetric products of planar domains. For example, we consider the following $n$-dimensional analog of the Cauchy Integral:

$$B_n \phi(z_1, \ldots, z_n) = \frac{1}{2\pi i} \int_{\Gamma} \frac{\phi(t)dt}{(t-z_1)(t-z_2)\ldots(t-z_n)},$$

where the smooth curve $\Gamma$ is the boundary of a domain $U$ in the plane, $\phi$ is continuous on $\Gamma$ and $B_n \phi$ is a function of $n$ complex variables. We prove the following result: For $k \geq 0$ and $0 < \alpha < 1$, the map $B_n$ is continuous from $C^{k+n-1,\alpha}(\Gamma)$ to $C^{k,\alpha}(U^n)$. Though the kernel of the integral transform is analytic, the mapping $B_n$ displays a loss of smoothness. (Received August 06, 2014)