Dirichlet distribution

$$\mathrm{Dir}(\textcolor{red}{\theta}|\alpha) = \frac{1}{B(\alpha)} \prod_{k=1}^{K} \theta_k^{\alpha_k - 1}$$

$\sum_k \theta_k = 1$

$\theta_k \geq 0$

$(0, 0, 1)$

$(0.3, 0.1, 0.5)$

$(1, 0, 0)$

$(0, 1, 0)$