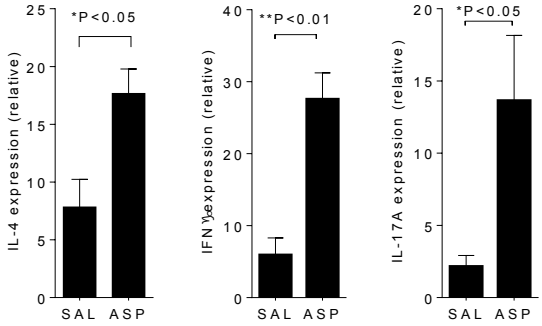
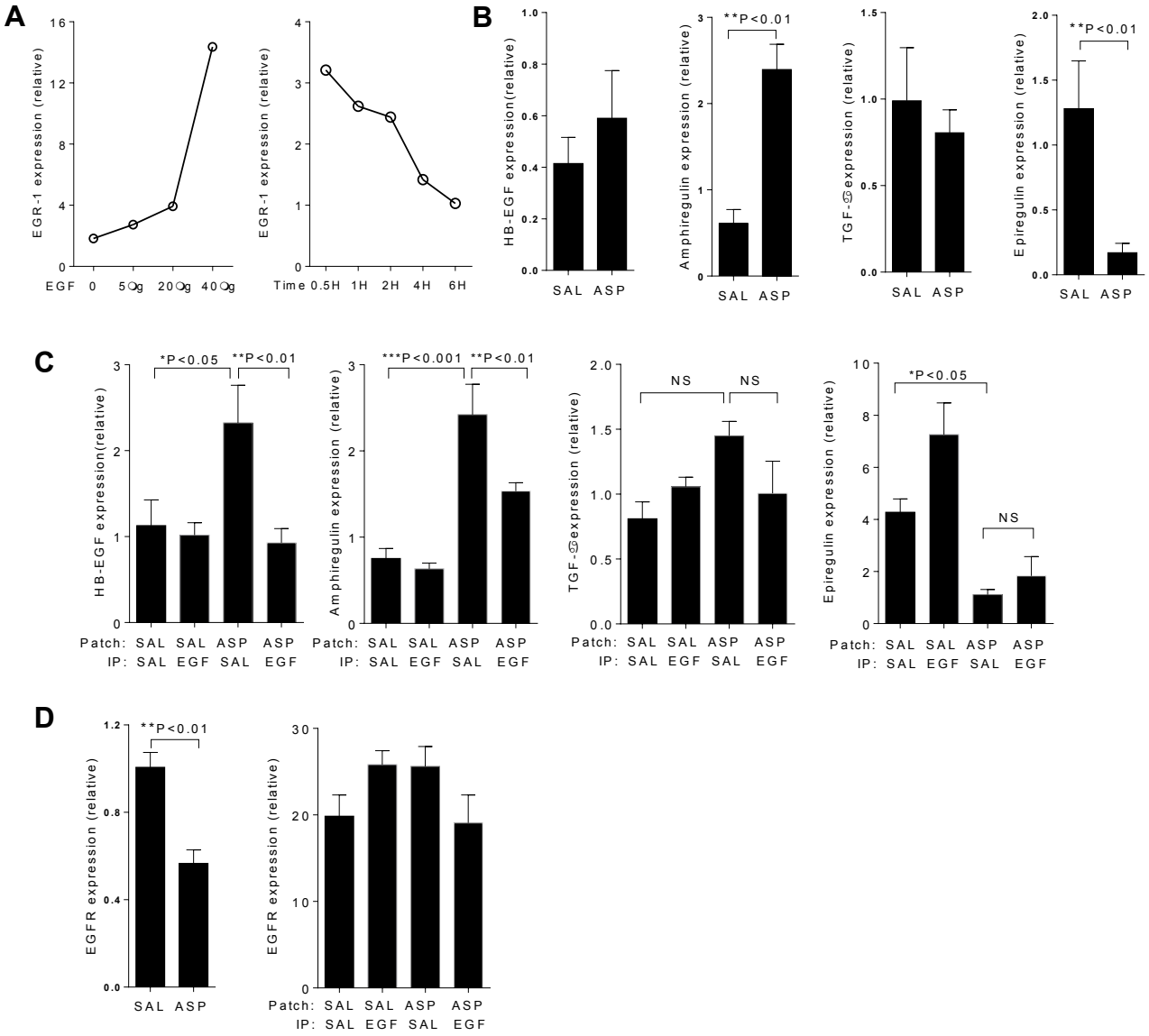
Supplementary Material

Supplementary Figure 1



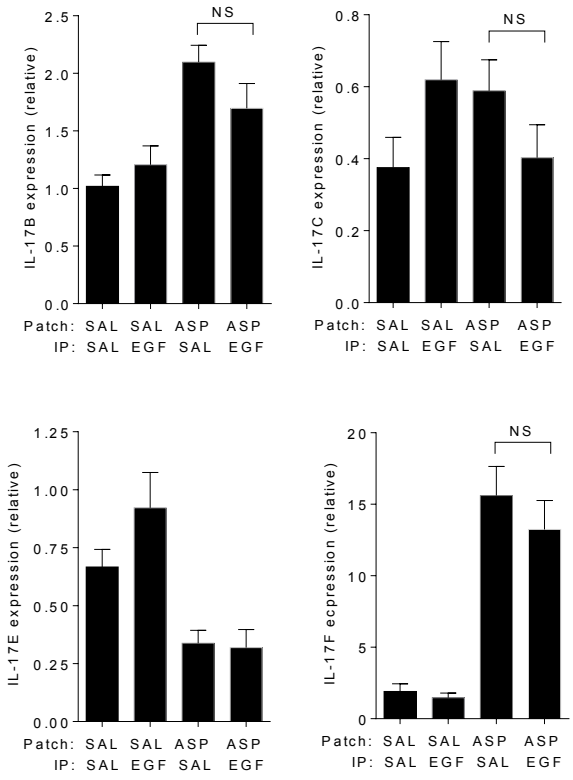
Supplementary Figure 1. Characterization of immune response in the acute AD model. Skin RNA samples were derived from mice subjected to the model in Figure 1A and expression of indicated cytokines (IL-4, IFNγ and IL-17A) was determined by q-PCR. Values are expressed as mean±SEM. *P<0.05, **P<0.01, and ***P<0.001.

Supplementary Figure 2



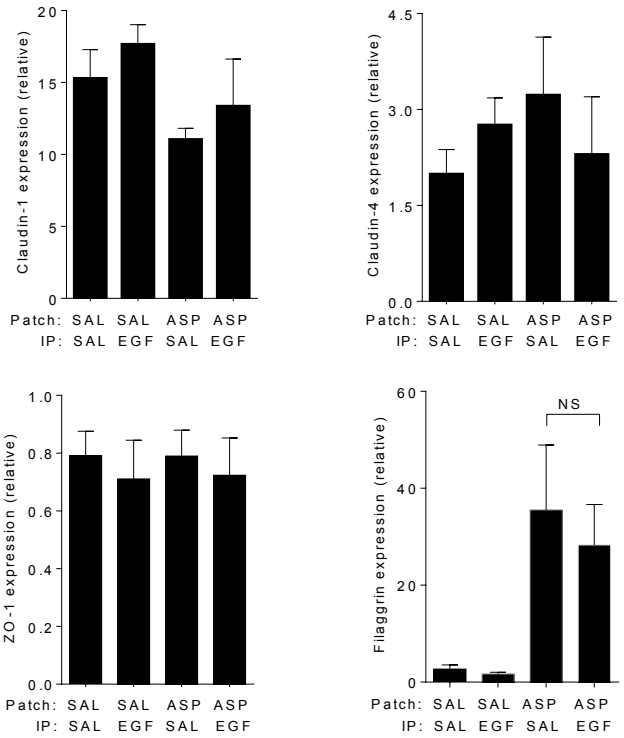
Supplementary Figure 2. Dose response and time course of EGFR signaling activation in skin tissue and Expression of EGFR and EGFR ligands (HB-EGF, Amphiregulin, TGF-α and Epiregulin) in the acute and AD chronic models. A. EGF (doses indicated) was injected ip and RNA was isolated from skin tissue 30 minutes later. EGF (40μg) was injected ip and skin RNA was collected at indicated time points. EGR-1 expression level was determined by q-PCR. B and C. Skin RNA samples were derived from mice subjected to A. acute model in Figure 1A and to B. chronic model in Figure 2A. Expression of the four main EGFR ligands in skin tissue was determined by q-PCR. D. Skin RNA samples were derived from mice subjected to the model in Figure 1A and 2A, and expression of EGFR was determined by q-PCR. Values are expressed as mean±SEM. . *P<0.05, **P<0.01, and ***P<0.001.

Supplementary Figure 3



Supplementary Figure 3. Expression of other IL-17 family members after allergen re-exposure and EGF treatment. Skin RNA samples were derived from mice subjected to the model in Figure 2A and expression of IL-17B, C, E and F was determined by q-PCR. Values are expressed as mean±SEM.

Supplementary Figure 4



Supplementary Figure 4. mRNA expression level of claudin-1, claudin-4, ZO-1 and filaggrin was unaltered by EGF treatment. Skin RNA samples were derived from mice subjected to the model in Figure 2A and expression of the indicated genes was determined by q-PCR. Values are expressed as mean±SEM.