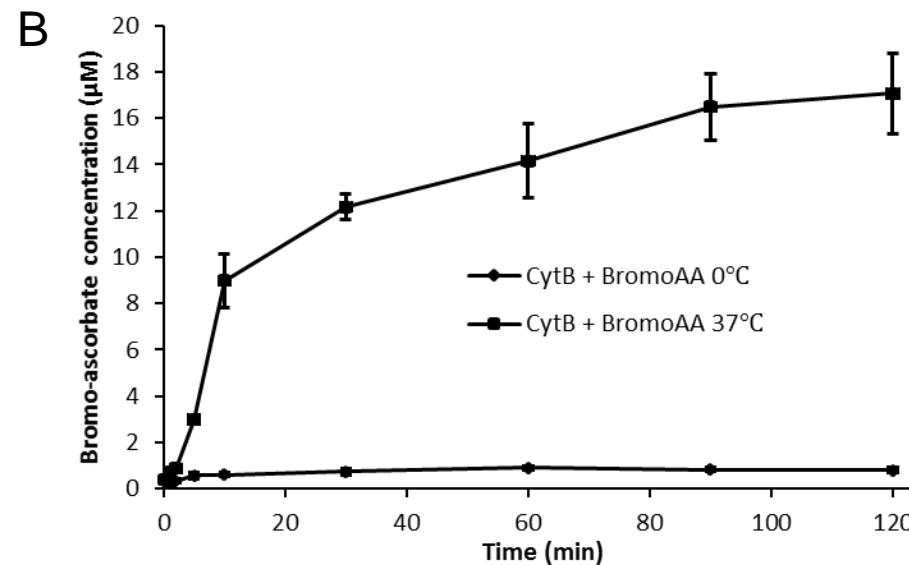
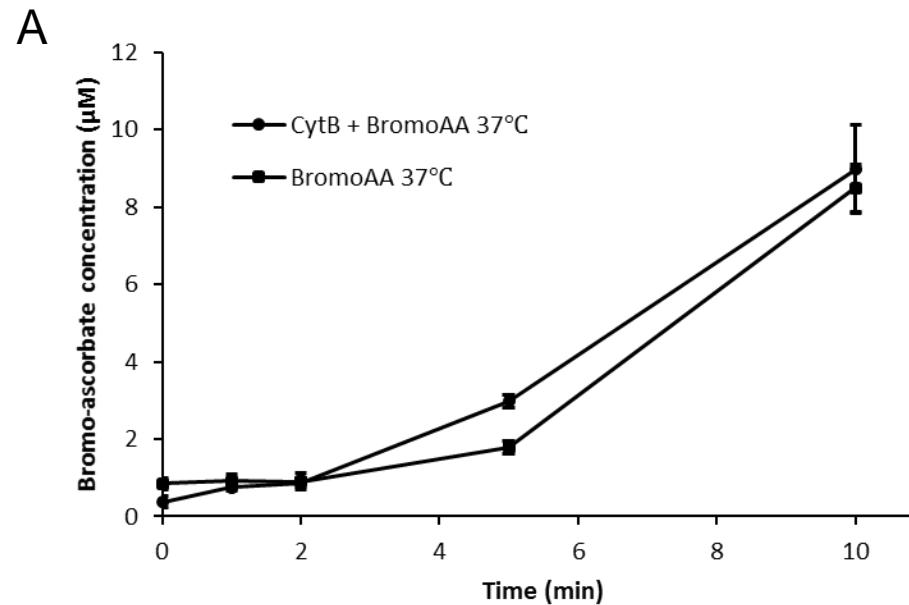
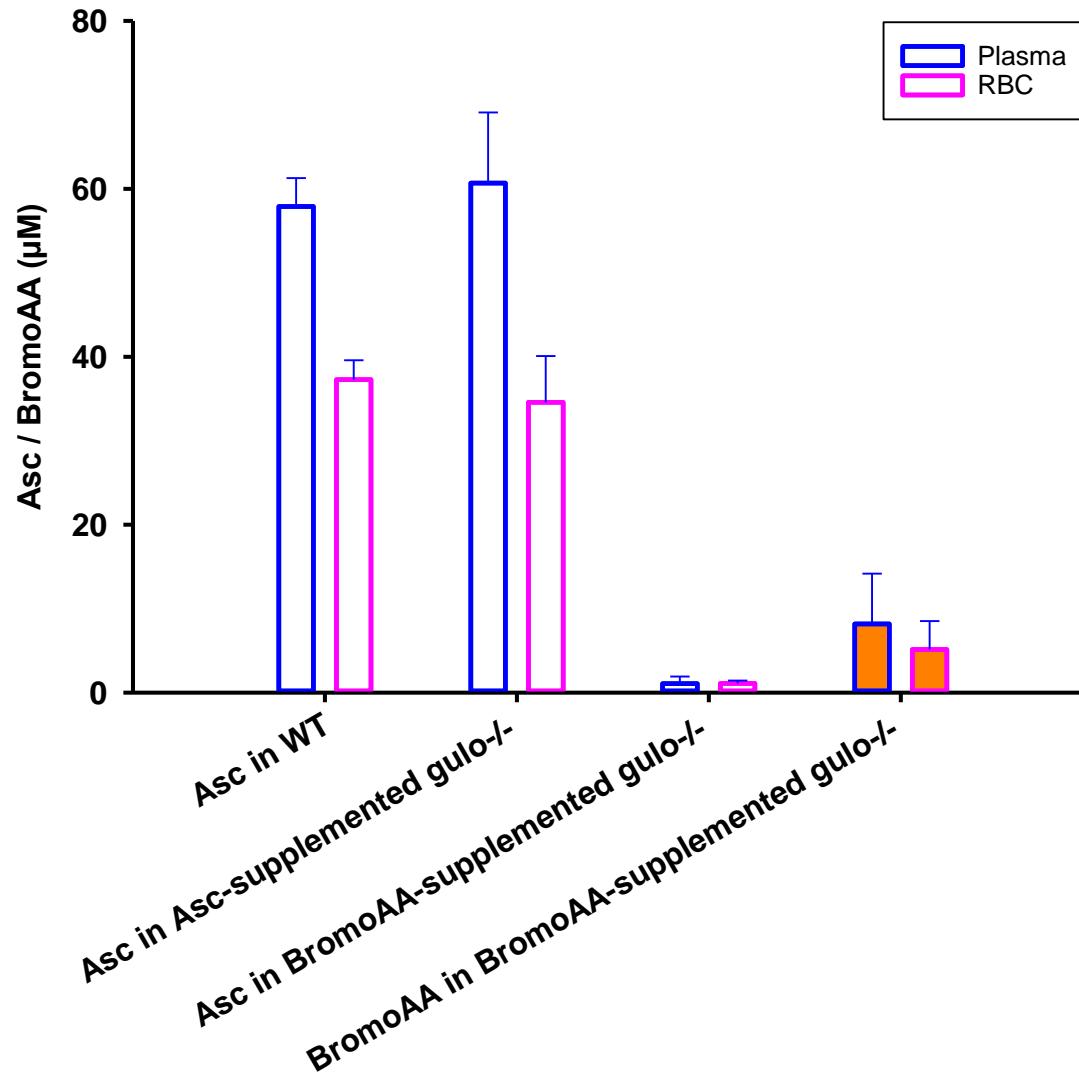


Supplemental Figure 1



Supplemental Figure 2



Supplemental Figure 3

Ascorbate
Supplemented



Ascorbate
 $62.5 \pm 9.8 \mu\text{M}$

Unsupplemented



Ascorbate
 $4.4 \pm 2.7 \mu\text{M}$

Supplemental Table 1 Histopathologic findings of *gulo*^{-/-} mice supplemented with bromoAA (N = 7, 60-64 weeks old) or ascorbate (N = 3, 60-64 weeks old) for one year

BrAA <i>gulo</i> ^{-/-} mice		AA <i>gulo</i> ^{-/-} mice	
A	Ear (middle and inner) – Spiral ganglion atrophy, Spiral ligament degeneration; Kidney, Salivary glands – lymphoid aggregates	63	Salivary glands – exorbital dacryoadenitis; Liver – Hepatitis; Harderian gland – lymphoid aggregates
B	Ear (middle and inner) – Spiral ganglion atrophy, Spiral ligament degeneration; Kidney, Salivary glands, Liver, Lung – lymphoid aggregates; Harderian gland – adenomas; Liver – Hepatitis	64	Ear (middle and inner) – polyps, mineralization and osseous metaplasia; Salivary glands – exorbital dacryoadenitis, lymphoid hyperplasia; Kidney – lymphoid aggregates, tubular proteinosis; Liver – Hepatitis
C	Ear (middle and inner) – Spiral ganglion degeneration; Kidney, Salivary glands, Lung – lymphoid aggregates; Liver – Hepatitis; Harderian gland – adenomas	65	Salivary glands – exorbital dacryoadenitis, Kidney – lymphoid aggregates, tubular proteinosis; Liver – Hepatitis
D	Ear (middle and inner) – Spiral ganglion degeneration; Kidney, Salivary glands, Liver – lymphoid aggregates; Liver – Hepatitis; Harderian gland – adenomas		
E	Ear (middle and inner) – Spiral ganglion degeneration; Kidney, Salivary glands, Harderian gland – lymphoid aggregates; Liver – Hepatitis		
F	Ear (middle and inner) – Spiral ganglion, Spiral ligament degeneration; Kidney, Salivary glands, Liver, Pancreas – lymphoid aggregates; Harderian gland – adenomas		
G	Ear (middle and inner) – Spiral ganglion, Spiral ligament degeneration; Kidney, Salivary glands – lymphoid aggregates; Liver – Hepatitis; Harderian gland – adenomas		