



**N** Antibodies in infants born to mothers with covid-19 pneumonia

## Antibodies in Infants Born to Mothers with COVID-19 Pneumonia

This is an interesting topic that relates to maternal immunity and how protective antibodies can be transferred from mother to infant. I'd be happy to discuss what we know about this phenomenon specifically in the context of COVID-19.

When mothers develop COVID-19 pneumonia during pregnancy, they produce antibodies against SARS-CoV-2. These antibodies can cross the placenta and potentially provide passive immunity to the newborn. Here are the key aspects of this process:

### Maternal Antibody Transfer

The primary antibody that crosses the placenta is IgG. This transfer typically happens during the third trimester through an active transport process involving Fc receptors. IgG antibodies are particularly important because they:

- Can cross the placenta efficiently
- Have a relatively long half-life in the infant (weeks to months)
- Provide passive immunity until the infant's immune system matures

Reply to Claude...



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